

THE AMERICAN ELEVATOR AND GRAIN TRADE

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VOL. XLII

431 South Dearborn Street, Chicago, Ill., March 15, 1924

NO. 9

WE ARE PROGRESSIVE ENOUGH
TO BE AGGRESSIVE FOR YOU

McKENNA & DICKEY
Grain
60 BOARD OF TRADE
CHICAGO

For your
Business Sake
Communicate

**LIGHTNING IS THE LARGEST
DESTROYER OF ELEVATORS**

COST OF PROTECTION SAVED IN REDUCED INSURANCE

Govt. State Municipal and Industrial Plants

Equipped with our 25-year Guaranteed System

THE ARROW CONDUCTOR CORP. CHICAGO

FEED SYSTEM ENGINEERING

for Feed Plant Construction and Equipment

Feed Formulas & Manufacturing Methods

S. T. EDWARDS & CO. 110 S. Dearborn St.
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Folwell-Sinks Form Lifting
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For
Grain Elevator
and Silo
Construction

(Patented)

Manufactured and sold by
NELSON MACHINE CO.
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Designer and Builder
of
Grain Elevators
DECATUR, ILL.

Reliance Construction Company

Furnish Plans, Estimates and Build
COUNTRY GRAIN ELEVATORS

Our long experience as a builder of elevators insures you an
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SCOOP TRUCK**

CAPACITY { 200 Lbs. Coal
2 1/2 Bushels Grain

Can easily add Ten
Cents an Hour to the
value of a man's time
who uses it in unloading Coal
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Hence, in two weeks' use
the Scoop-Truck will pay for itself and
cost you nothing for its use thereafter.

It will last for years and save the wear-
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a like amount of work.

Hundreds have tried it and will certify to the
truth of these statements.

Why not order now and let the Scoop-Truck
be giving itself to you?

Patented July 30, 1907

PRICE: \$15.00 F. O. B. cars at factory

Detroit Scoop Truck Co., 993 Osborne Place, Detroit, Mich.

**JONES-HETTELSATER
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Designers and Builders

**MILL BUILDINGS :: ELEVATORS
FEED PLANTS**

706 Mutual Building, Kansas City, Mo.

When grain boats begin to dock

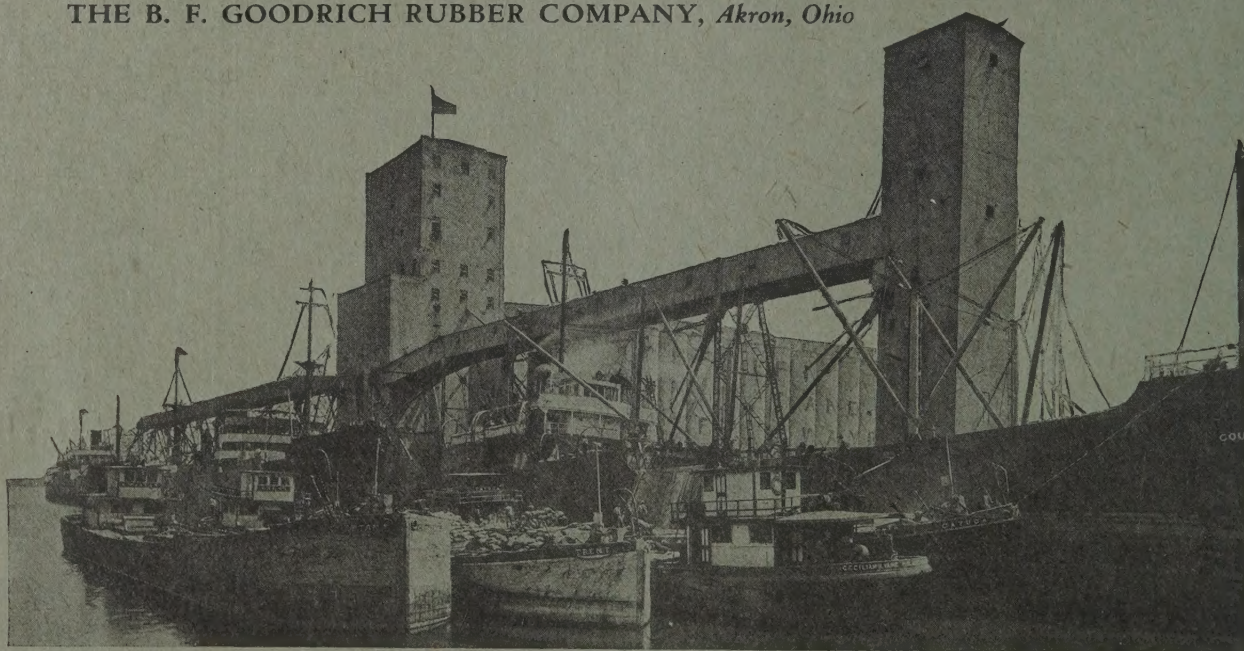
Make sure that they unload into your bins not into those of your competitor. It all depends on the careful thought you give your belts *before* the rush. Moving grain waits for no man's belt.

To produce belts that assure unbroken service and a long life, Goodrich engineers developed Legrain and

Carigrain Belts from close actual study of elevator conditions and needs. They are proof against alternate dampness and dryness. They age slowly, and run true to the line.

Prevent lost tonnage by avoiding stoppage. The reliability of Legrain and Carigrain Belts is your protection.

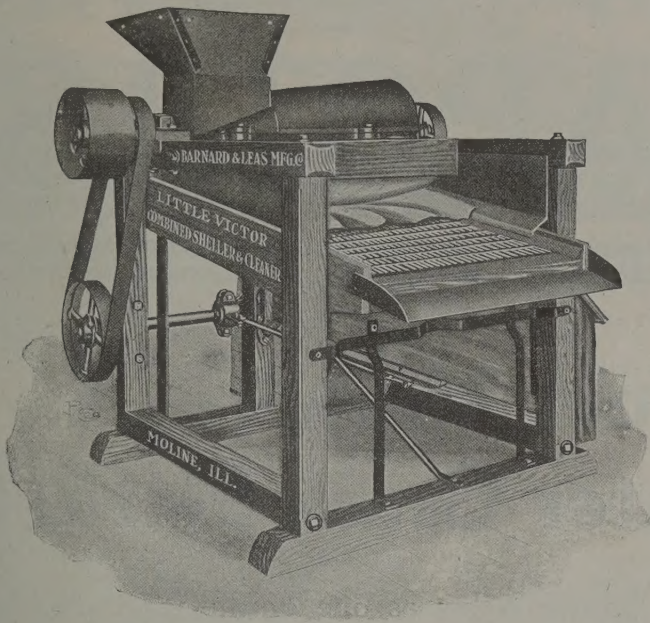
THE B. F. GOODRICH RUBBER COMPANY, Akron, Ohio



Goodrich

“Legrain” and “Carigrain” BELTS

“BEST IN THE LONG RUN”



LITTLE VICTOR COMBINED CORN SHELLER AND CLEANER

A Combined Service that means Increased Profits

This machine actually shells and cleans corn thoroughly in one operation, thereby giving a combined service that produces increased profits for its owner. It is the ideal machine for the small miller or grain dealer having small space.

It is built in two convenient sizes. The small size occupies a space—only 4 feet 9 inches by 4 feet 5 inches, and will handle 60 to 75 bushels of corn per hour, while the large size machine occupies a space—5 feet 3 inches by 7 feet, and will handle 125 to 150 bushels of corn per hour.

After being shelled, the corn passes onto our *Patented Finger Sieve*, which absolutely removes, without choking, all cobs, husks, pieces of cob, etc., then it passes through a strong current of air which removes all chaff, silk and other light impurities, leaving the corn perfectly clean. Its thousands of users have proven this to be the only correct method of cleaning corn thoroughly without clogging and yet save every good sound kernel.

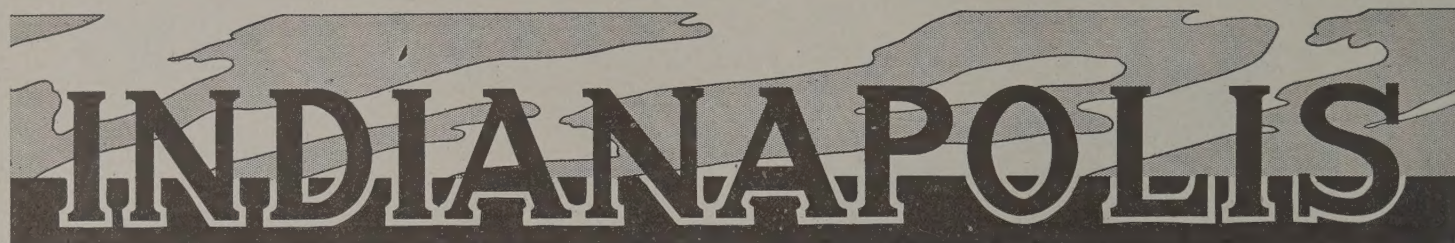
We have been building corn shellers and cleaners for sixty-three years and make a style and size for every corn mill requirement. Our Special Bulletin E-16 illustrates and describes our full line. Write for your copy now.



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MILL BUILDERS AND MILL FURNISHERS

ESTABLISHED 1860. MOLINE, ILLINOIS, U.S.A.



INDIANAPOLIS

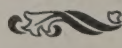
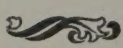
Indianapolis—Your Market—A Three Times Greater Grain Market

Indianapolis, the center of grain centers, is known today as one of the most important, rapidly growing grain and hay markets in the country. Receipts of grain during the last ten years have nearly trebled in volume, due to the advantages its geographical location offers to the grain and hay producing and consuming sections of the country, its splendid railroad facilities assuring prompt returns on shipments, its large local consumption of grain by its corn and flour mills and its manufacturing industries, its increased elevator storage and drying equipment, its adequate weighing facilities and efficient inspection department. This has made Indianapolis more and more important each season for shippers and buyers of grain, hay and feed.

Movement of Grain and Hay During the Year 1923

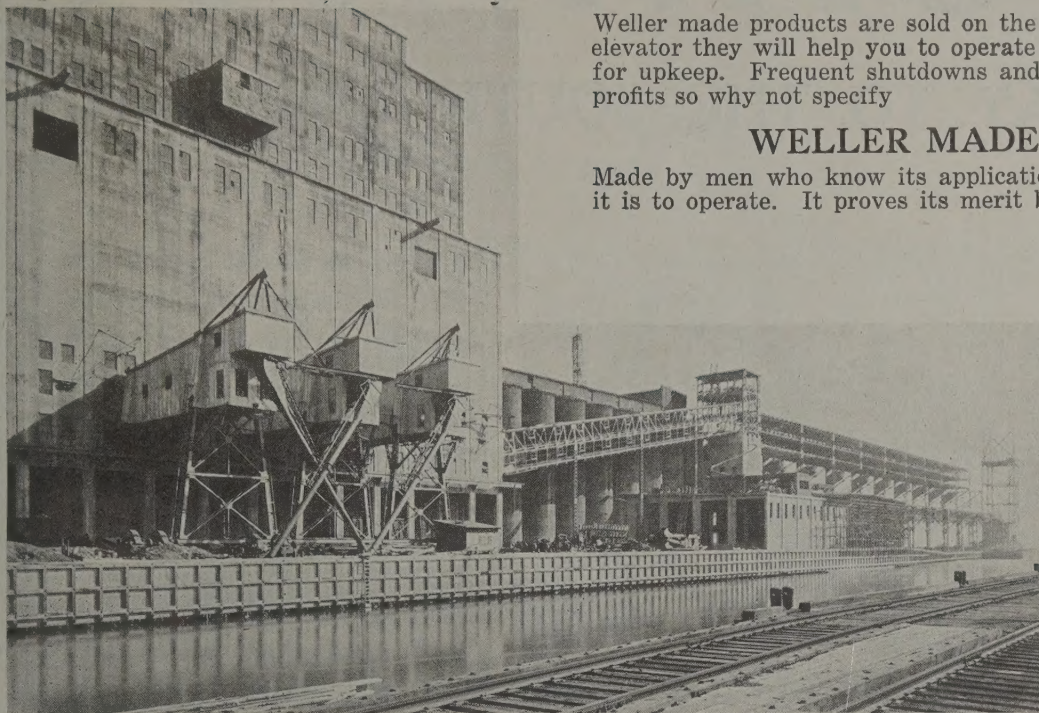
| | Receipts | Shipments |
|-------------|--------------------|--------------------|
| Corn | 17,975,000 bushels | 12,524,000 bushels |
| Oats | 12,080,000 bushels | 10,670,000 bushels |
| Wheat | 6,131,000 bushels | 3,927,000 bushels |
| Rye | 383,000 bushels | 331,000 bushels |

The following Receivers and Shippers are members of
Indianapolis Board of Trade

| | | |
|---|--|--|
| Bert A. Boyd Grain Co. The Indianapolis Commission House <i>"Consignments Our Hobby"</i> We Never Buy for Ourselves—We Always Sell for You | JAMES E. BENNETT & CO. GRAIN, STOCKS, COTTON MEMBERS New York Stock Exchange Chicago Board of Trade and other leading exchanges. <i>Cash Grain Shipments Solicited</i> Indianapolis branch at 718 Board of Trade | H. E. Kinney Grain Co. COMMISSION—BROKERAGE |
| The Cleveland Grain Co. OPERATING FIVE TERMINAL ELEVATORS <i>Mighty Good Consignment Service</i> Ed. K. Shepperd, Manager | The Bingham Grain Company Receivers and Shippers of G R A I N | Lamson Bros. & Co. GRAIN, STOCKS AND PROVISIONS Members of New York Stock Exchange, Chicago Board of Trade and other Commodity Markets |
| <div style="display: flex; justify-content: space-between; align-items: center;">  <div style="text-align: center;"> C. D. Menzie Grain and Brokerage Co. SALES MADE TO ARRIVE </div>  </div> | | |

WELLER EQUIPMENT

The Better Kind of Grain Handling Machinery



NORTHERN CENTRAL ELEVATOR, BALTIMORE, MD.

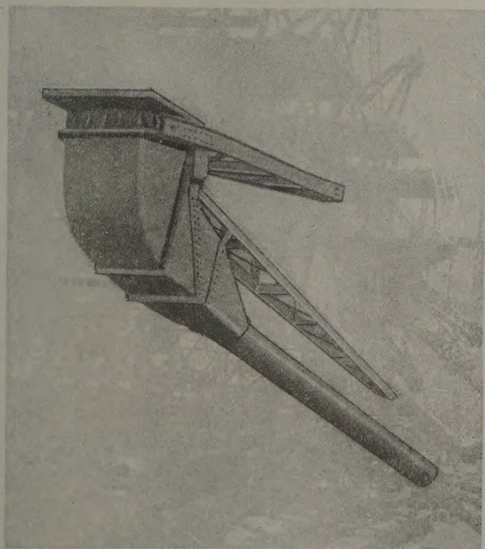
Weller made products are sold on the basis of quality. Installed in your elevator they will help you to operate at full capacity at the lowest cost for upkeep. Frequent shutdowns and waiting for repairs dissipate your profits so why not specify

WELLER MADE MACHINERY

Made by men who know its application and the conditions under which it is to operate. It proves its merit because quality is built into it.



MARINE LEG
NORTHERN CENTRAL ELEVATOR
BALTIMORE, MD.



DOCK SPOUTS
NORTHERN CENTRAL ELEVATOR
BALTIMORE, MD.

WE MAKE

| | |
|------------------|-----------------|
| Apron Conveyors | Elevator Spouts |
| Belt Conveyors | Loading Spouts |
| Drag Conveyors | Dock Spouts |
| Pan Conveyors | Chain |
| Mixing Conveyors | Sprockets |
| Spiral Conveyors | Grain Cleaners |
| Trippers | Grain Driers |
| Bucket Elevators | Truck Dumps |
| Elevator Buckets | Wagon Dumps |
| Elevator Boots | Track Hoppers |
| Elevator Casing | Power Shovels |
| Elevator Heads | Car Pullers |
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| Barrel Elevators | Gears |

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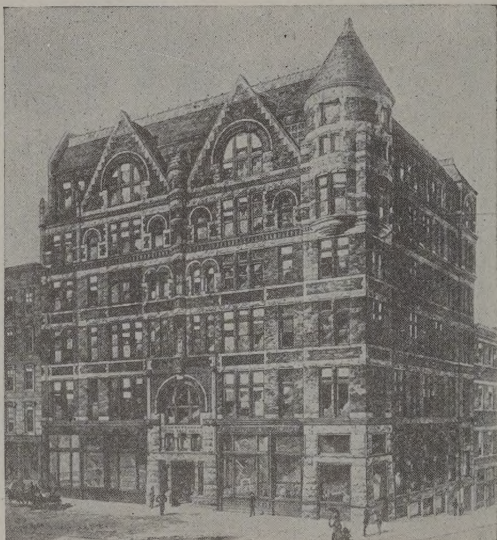
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THE GATEWAY TO THE SOUTH AND EAST

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Has reconsignment and transit privileges and other favorable points which insures most successful handling of grain or hay shipments.



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Those are just a few of the reasons why you should ship your Grain and Hay to Cincinnati. Ship to any of the following responsible grain and hay firms, all members of the

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MUTUAL COMMISSION COMPANY,
Strictly Commission

DE MOLET GRAIN CO., Grain and Hay

A. C. GALE & CO., Shippers of Choice
Milling Wheat

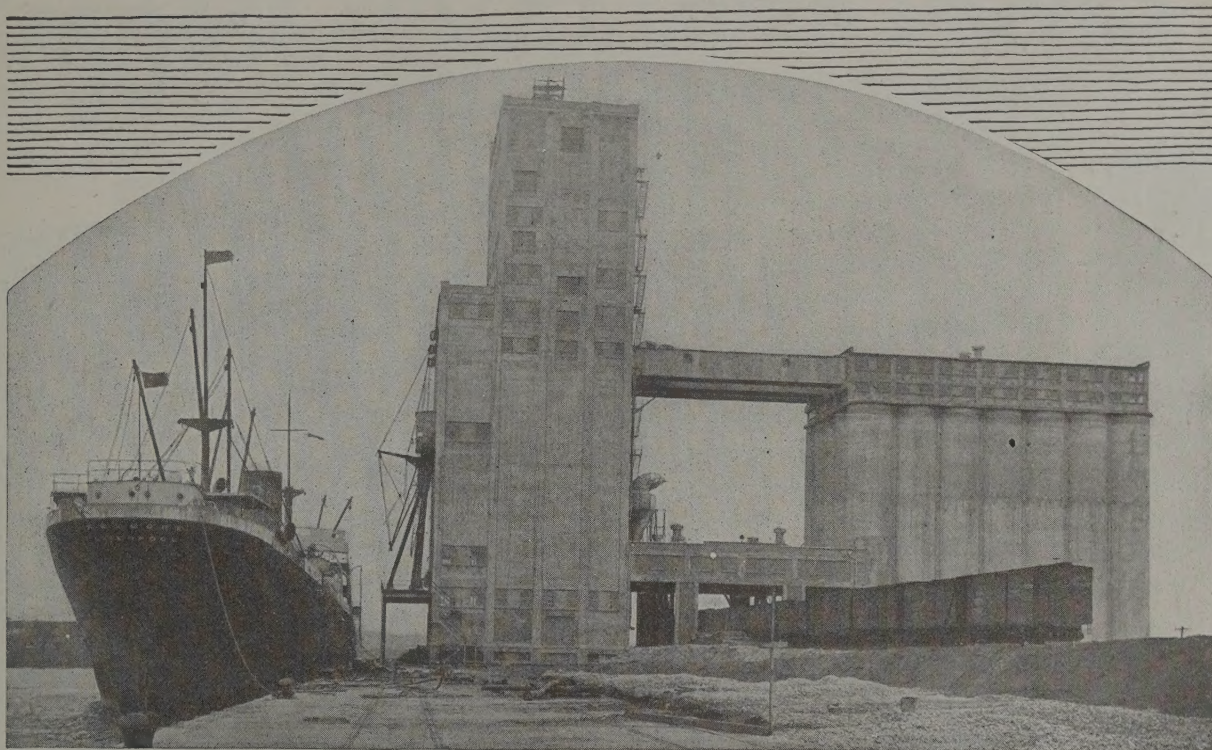
CLEVELAND GRAIN & MILLING CO.,
Grain

THE McQUILLAN CO., Hay and Grain

SCHOLL GRAIN CO., Grain Exclusively

PERIN, BROUSE, SKIDMORE GRAIN &
MILLING CO., Grain, Hay, Feed

EARLY & DANIEL CO., Hay, Grain, Feed



A "Known Quantity" in Modern Grain Elevator Equipment

WEBSTER service to grain elevator engineers and builders is based on an intimate knowledge of the grain elevator business coupled with an unusual ability to meet its particular conditions. This service has years of background, experience, and development behind it. As a result Webster Grain Handling Equipment is a known quantity in modern elevator practice regardless of whether the equipment includes Marine Legs, Belt Conveyors, Elevators, Loading Hoppers, Spouting, or Power Transmission Machinery.

Engineers and Builders of Grain Elevators and Mills will therefore find it worth while to work with Webster Engineers on their grain handling problems. They will help you in selecting suitable equipment to meet your particular requirements. This service is at your disposal.

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NEW YORK.....90 West Street
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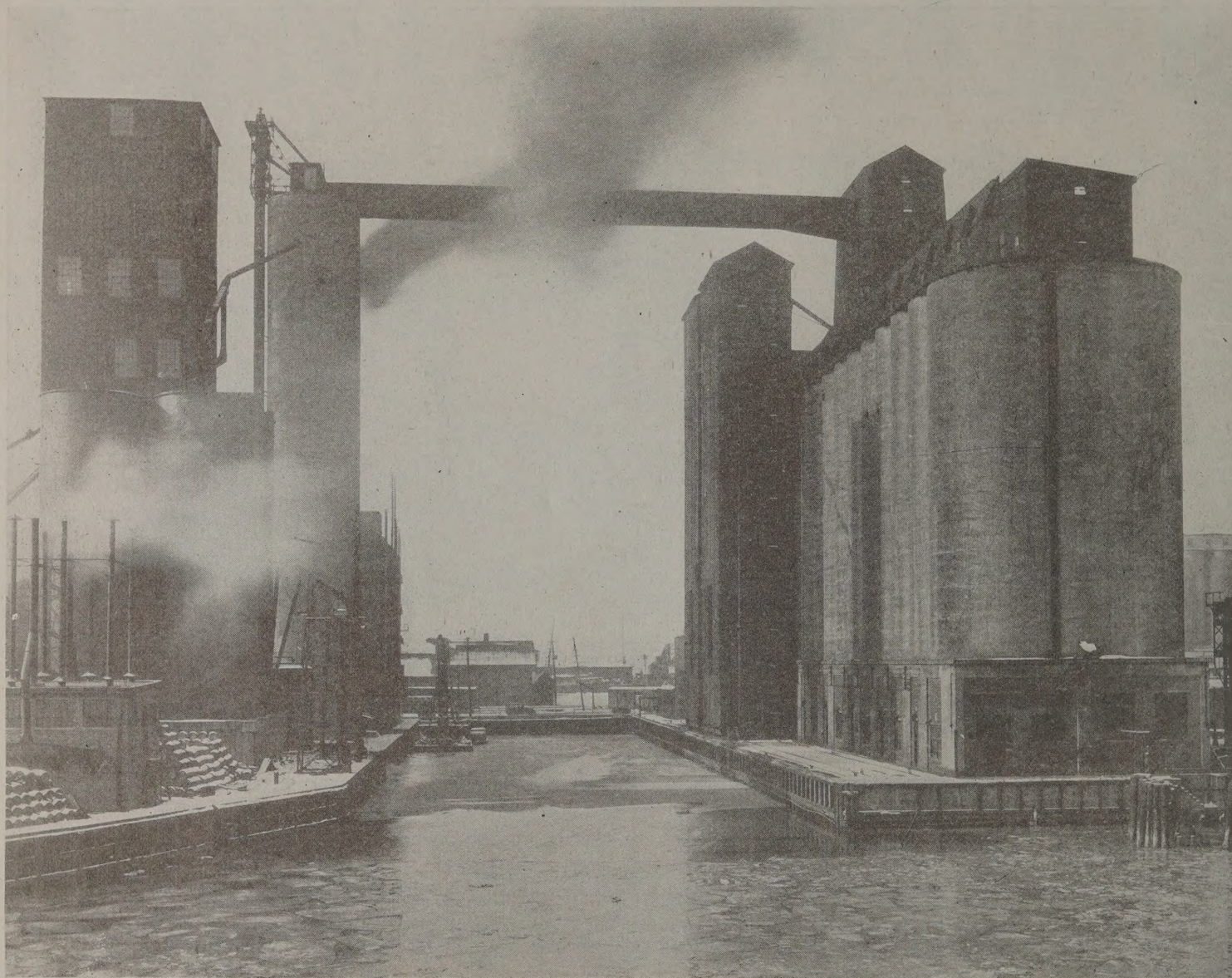
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KELLOGG ELEVATOR

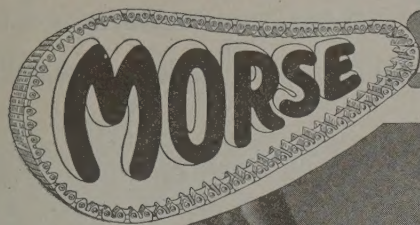


Capacity 1,200,000 Bushels

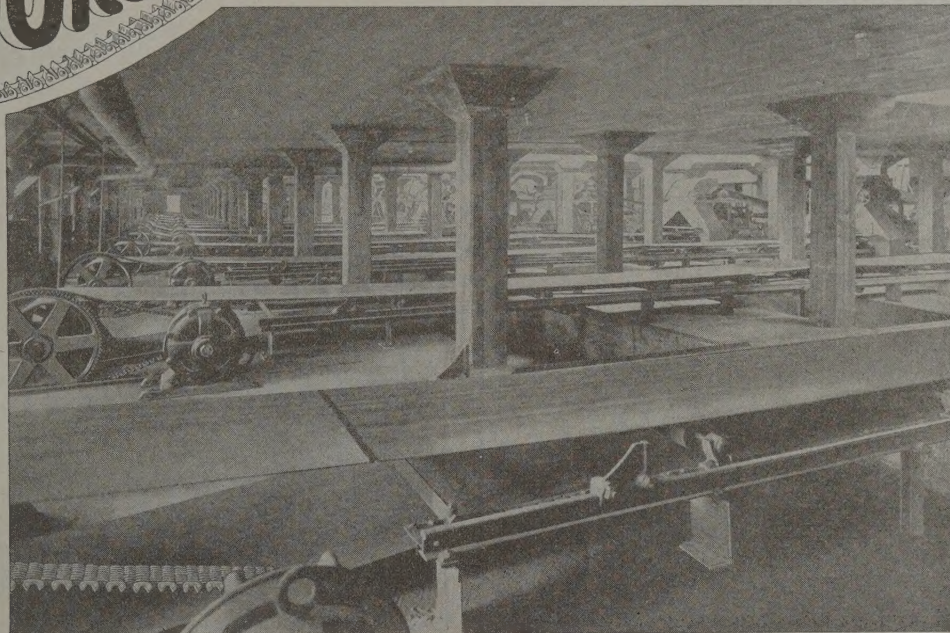
| | |
|---------------------|-----------------|
| Daily Receiving | 200,000 to |
| <i>and</i> | 250,000 Bushels |
| Shipping Facilities | |

RAIL *and* CANAL FORWARDING

Spencer Kellogg and Sons, Inc., Buffalo, N. Y.



SILENT CHAIN DRIVES



13 Morse Silent Chain Drives connecting motors to conveyor belts above storage bins.

Speed—Efficiency—Safety in Elevator Power Transmission

Movement of grain swift, sure, controlled; from the receiving end to car, barge, or storage bins is the key to elevator profit—Morse Chains ably assist in this movement.

A Morse Silent Chain Drive will not slip, creep, weave from side to side, or burn. It is the logical drive to insure continuous operation, long life, and low upkeep. And the most practical drive for the crowded conditions that exist in elevators, where space must be used to the utmost.

Note in the picture above, the short distances between centers of the driver and driven sprockets.

These Morse Chain Drive installations assure smooth, continuous, operation of the conveyor belts, and a more even distribution of grain on the belt; resulting in increased handling capacity.

Let our Engineers plan a drive for your elevator that will run cool, clean, and transmit and sustain 98.6% of the developed horse power.

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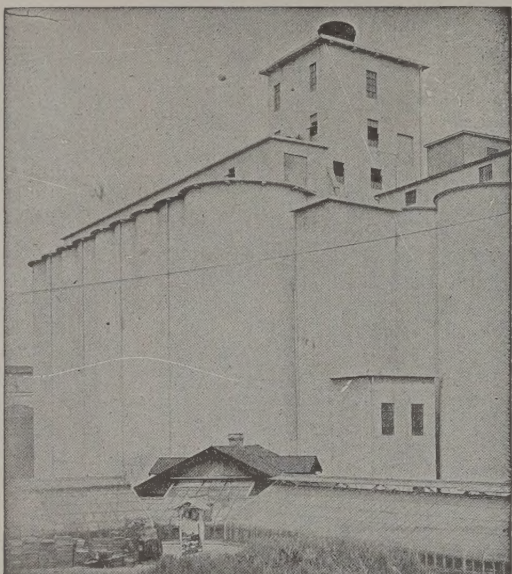


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SEND US YOUR INQUIRIES



400,000-BUSHEL ELEVATOR

BUILT FOR

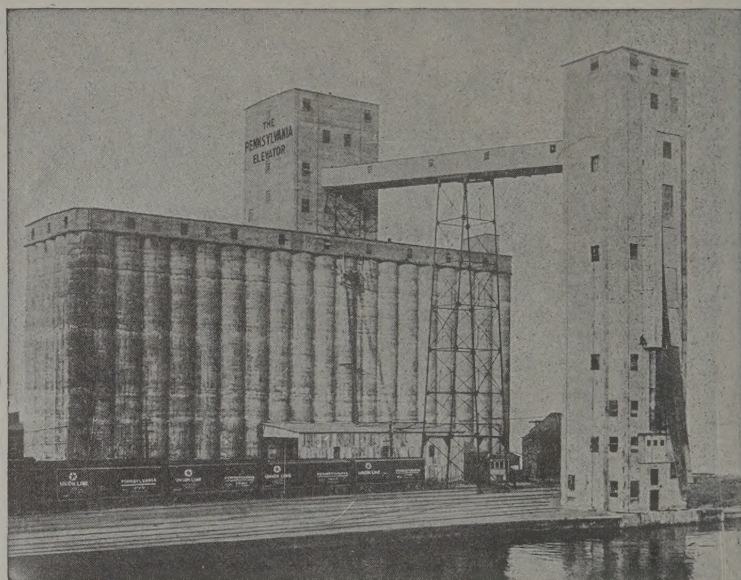
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Tower. Reinforced Concrete. Latest improvements. Write us for
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DESIGNED AND BUILT BY
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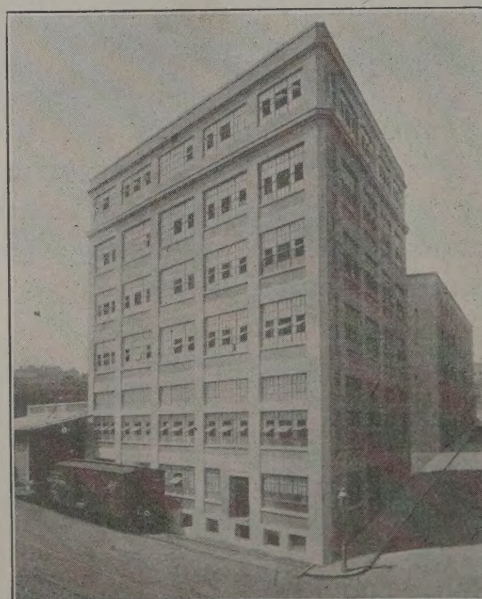
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Efficiency and
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All-steel machines for all kinds of
CIRCULAR CONCRETE CONSTRUCTION

We contract grain storages, water
towers and coal pockets.

Polk-Genung-Polk Company

Fort Branch,

Indiana

ARE YOU WORRIED

about the condition of that grain in your bins?

Let us equip your storage with a

Zeleny Thermometer System

to tell you the exact condition of
the grain and cut out the worry

Over 100 Elevators Equipped

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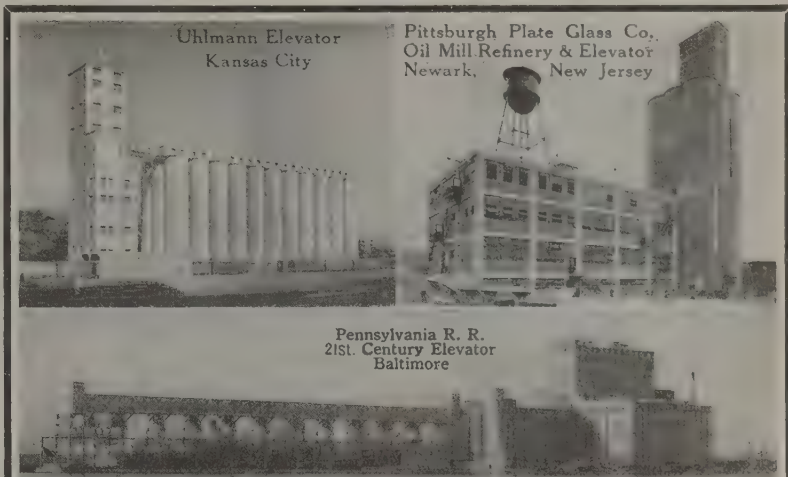
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GRAIN FUMIGATION PAYS

We have developed it along
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1710 Grand Avenue Kansas City, Mo.



JAMES STEWART & COMPANY, Inc.

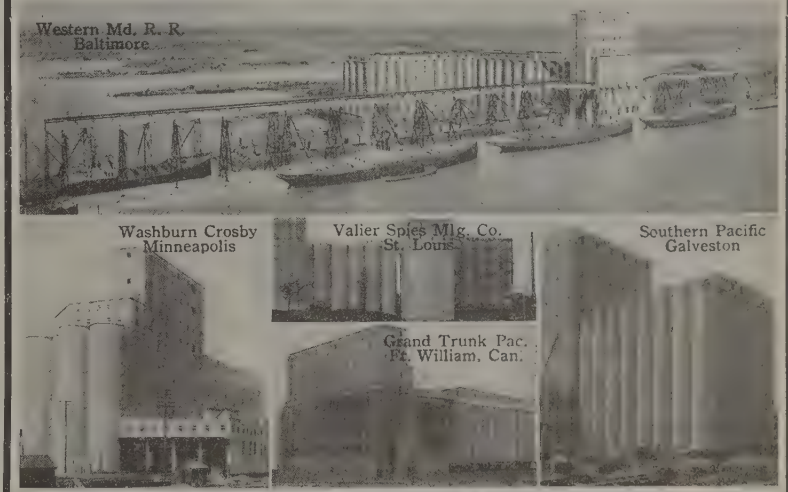
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Grain Elevators

W. R. SINKS
Manager

In all parts of the world

*Every day in every way we are designing and building better and better Grain Elevators.
We have built for many of your friends—Eventually we will build for you. Why not now?*



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**ELEVATORS, MILLS AND WAREHOUSES
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General Overhauling and Improvements

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SPECIALIZING in the construction of fire-proof grain elevators of advanced design. We are prepared to build anywhere. The following are now building:

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Capacity 1,500,000 Bushels
Completed 1914



Buenos Aires Elevator Co.
Buenos Aires, Argentina
Capacity 750,000 Bushels
Completed 1920



Chicago & North Western Railway Elevator
South Chicago, Illinois
Capacity 10,000,000 Bushels
Completed 1920

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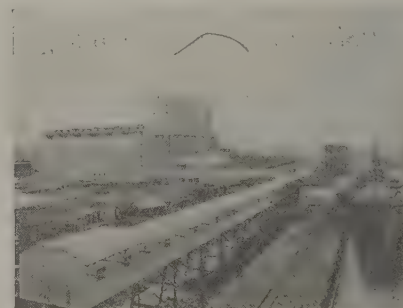
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Harbour Commissioners Elevator No. 2
Montreal, Quebec
Capacity 2,600,000 Bushels
Completed 1912



Sydney Terminal Elevator
Sydney, Australia
Capacity 6,400,000 Bushels
Completed 1921



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Built Elevators
Assure You
Economical Design
First Class Work
Efficient Operation
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Let Us Submit
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One of the Modern Houses Which Has Made a Record
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CONCRETE CENTRAL, BUFFALO, 4,500,000 Bu.



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Designers and Builders of

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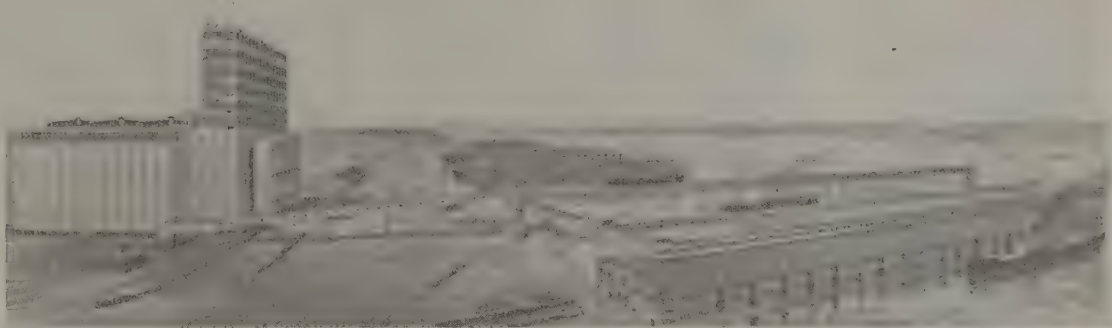
Fort William, Ontario



Baltimore & Ohio Terminal Elevator, Baltimore, Md.

Now Under Construction
Capacity 3,800,000 Bushels

17 GUILFORD AVENUE,
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THE M. A. LONG CO.

Engineers and Constructors
Grain Elevator Department



The Day Dust Collecting System

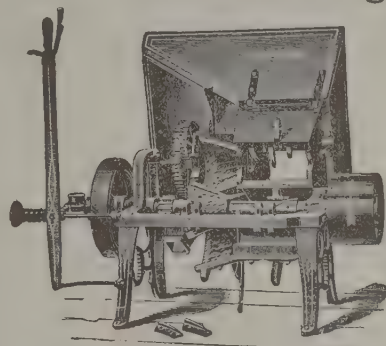
Dust Collectors alone do not prevent explosions in elevators, but Day Dust Collecting Systems do when properly installed.

For catalog write

THE DAY COMPANY, Minneapolis, Minn.

Make Feed Grinding More Profitable!

Bowsher's "Combination"
Mills do this



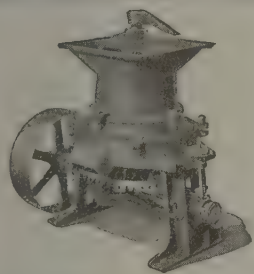
Because their large capacity, cone-shaped grinders and positive self ear feeders are properly designed to direct every ounce of power energy to the actual reduction of the grain.

Crush and Grind ear corn, husked or unhusked, alone or mixed with any kind of small grain in any desired proportion. Reduce the material to any fineness desired for feeding purposes.

11 Sizes, 2 to 25 H.P.

Sold with or without Sacking Elevator.

The N. P. Bowsher Co., South Bend, Ind.



**YOU CAN'T
GO WRONG**

when you install
TRIUMPH

Corn and Cob
CRUSHERS

Let us send you a descriptive
bulletin. It tells all about them.

THE C. O. BARTLETT & SNOW CO.
Cleveland, Ohio

Transit Leaks

are unknown to the grain ship-
pers who use

KENNEDY Car Liners

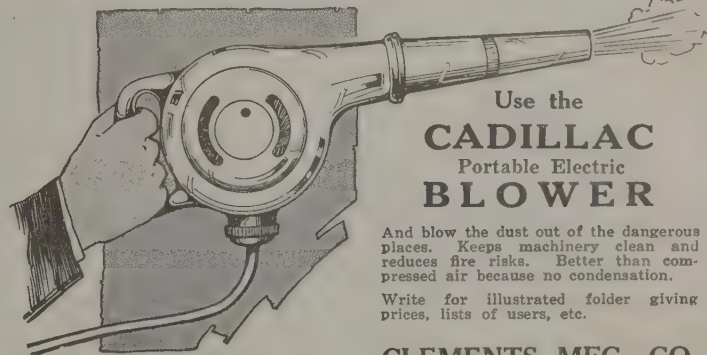
Enormous Increased Sales prove
the Efficiency, Merit and Service-
ability of these liners.

The Kennedy Car Liner

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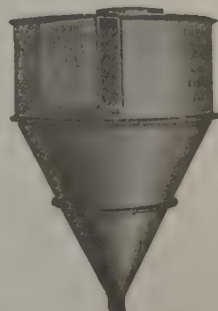
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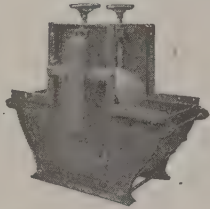
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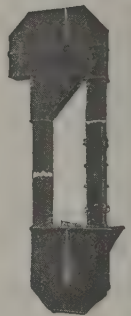
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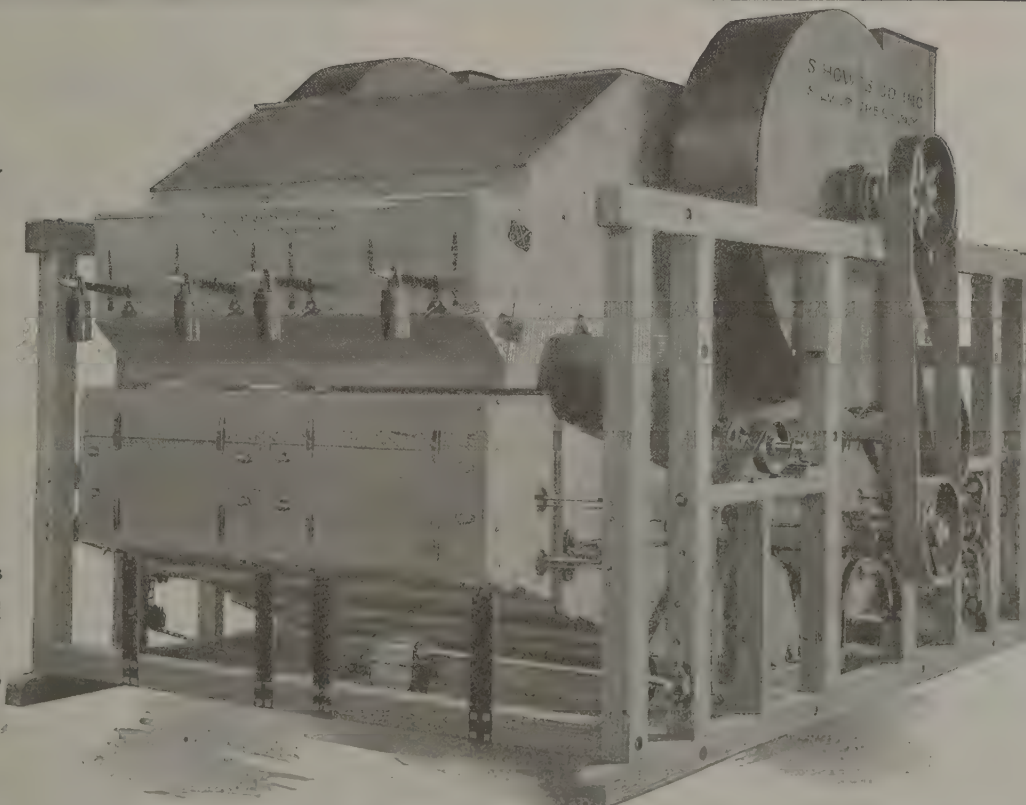
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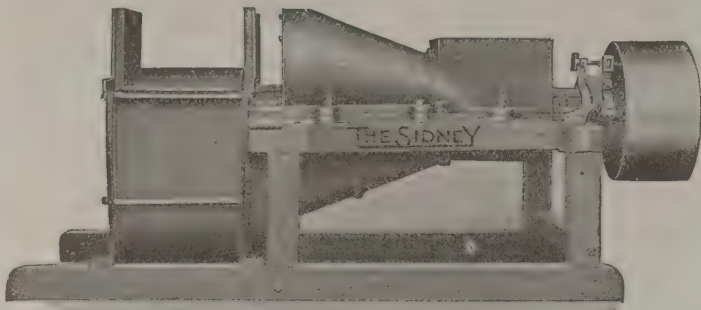


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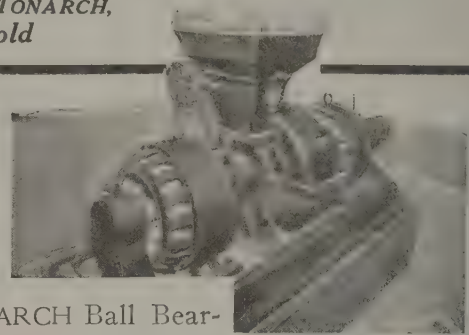
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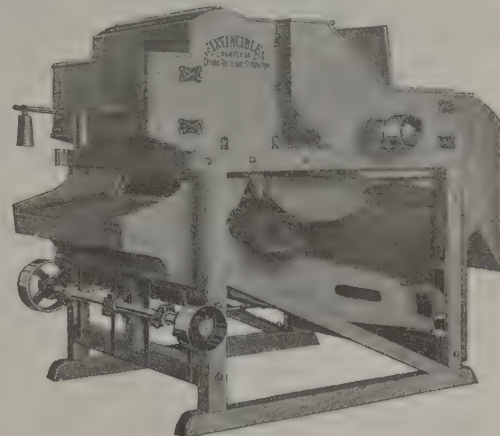
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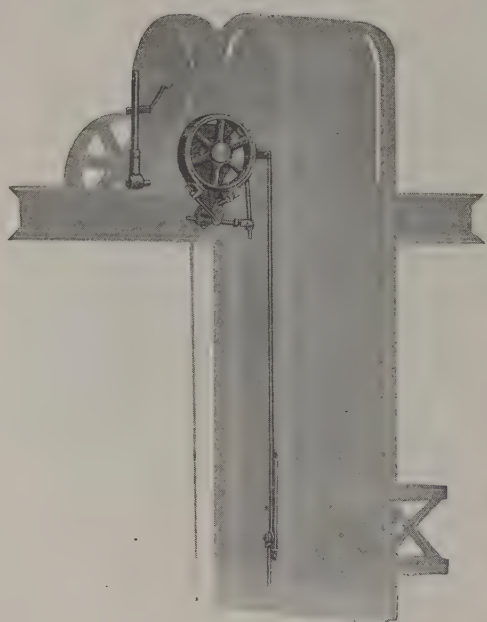
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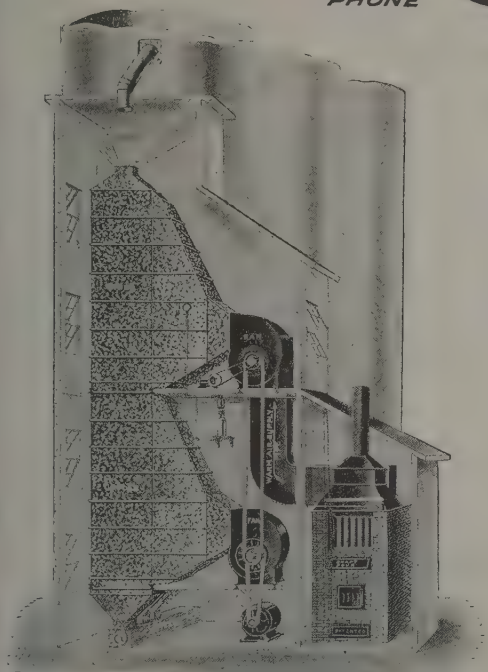
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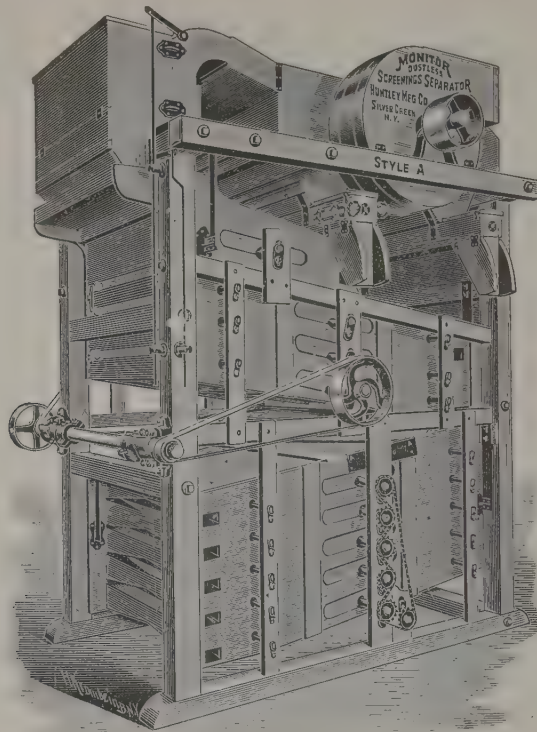
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Humphrey Elevator





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No one can say that every lot of screenings are worth separating but on the other hand, many lots of screenings are made up of valuable good stock. If you find in the screenings that you handle, a percentage of good wheat, of cracked wheat, of oats, of flax or of mustard (they may all be there), then its time to act. As screenings, they are plain feed; separated, they become a series of valuable grains, salable at good prices.

Yes, the MONITOR Screenings Separator is the only machine which will in one operation, reclaim them all. Just once over and there they are, each by itself. How long would you have to run—how many tons would you have to handle to pay for the machine? It would surprise you when you found how quickly you would do this. Then think of the years to come, each returning a nice profit from the separator.

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A monthly journal devoted to the elevator and grain interests.

Official paper of the Grain Dealers' National Association and of the Illinois Grain Dealers' Association.

Established in 1882.



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Subscription price, \$1.00 per year.
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Established in 1882.

VOL. XLII

CHICAGO, ILLINOIS, MARCH 15, 1924

NO. 9

Buffalo Elevator Doubles Its Handling Capacity

WHATEVER the future holds for the grain trade, one thing is quite certain: Enormous quantities of grain will continue to pass through Buffalo on their way to seaboard. Neither a St. Lawrence deep waterway nor a great development of lake-barge service through the New York State Barge Canal, will change this fact, for there will always be grain tonnage in demand at New York, Philadelphia, Baltimore and other ocean ports and there will always be lake vessels that find plenty of work on fresh water without venturing on the high seas. These boats will break bulk at Buffalo and the elevators there will continue to get business as they always have in the

past. There has been some pessimism as to the future expressed by a few Buffalo elevator operators, but not by anyone connected with Spencer Kellogg & Sons, Inc., whose 1,200,000-bushel elevator at the lower end of Lake Erie has just been remodeled to permit of an increase in handling speed that more than doubles the former capacity. This improvement was made by reason of the vision of the company, which believes in the future, seeing in prospect a continuing flood of grain from the prairie provinces of Canada and from our own Northwest. To handle this properly at the lower end of the Lakes requires large storage capacity, but more than that it requires facilities for the utmost speed in han-

dling. The rail tonnage east of Buffalo takes care of ordinary shipments, and supplemented with the canal barges, all but the heaviest congestion can be handled. As more barges are added to the canal traffic there will be little complaint of equipment, but when the grain boats are arriving in number, it will be the house of the greatest handling speed which will be able to give the largest measure of service. And this is the condition which the newly designed Kellogg Elevator was made to meet.

Spencer Kellogg & Sons, Inc., is one of the great linseed oil producers of the country, with crushing mills at Superior, Wis., and Buffalo. But the Kellogg Elevator at Buffalo is operated en-



KELLOGG ELEVATOR AT BUFFALO, N. Y., WHICH HAS RECENTLY DOUBLED ITS HANDLING CAPACITY

tirely distinct from the mill; in fact the flaxseed of the company is elevated and warehoused in the elevator on the same basis as commercial grain.

The plant is located on the Buffalo River with adequate berths for lake steamers and canal boats. It is also served by the Buffalo Creek Railroad and has ample trackage to handle comfortably the maximum capacity for shipping. The elevator is of steel and concrete, built by the Monarch Engineering Company of Buffalo. The storage is divided among 65 bins so that any variety of grain or grade can be kept separate. The house is in two sections divided by a slip and connected by an overhead gallery. The main house on the right has a capacity of 1,000,000 bushels, while the loading house on the left has room for 200,000 bushels in its bins.

The elevator is equipped to receive grain from cars or boats and can also load to both. Eight hopper scales are arranged to give the greatest flexibility in weighing in and out grain. The power is electric, 28 motors of from five to 250 horsepower receive their current from Niagara Falls power. Transmission is by rope, chain, and belt, and that it is efficient is attested from the fact that about 20,000,000 bushels of grain are handled through the house each year. This amount, with the new facilities, may be increased during the coming season. For before the changes were made it was difficult for the elevator to guarantee shipment of 100,000 bushels a day, but now it is in position to ship 200,000 bushels in 10 hours, and by working overtime, to send out 250,000 bushels a day, with approximately the same receiving capacity.

The company is looking forward to a busy and prosperous season, and many years activity on the Buffalo market.

THE TARIFF PROCLAMATION

On March 7 President Coolidge issued a proclamation increasing the duty on wheat and wheat products. The duty on wheat is increased from 30 to 42 cents per bushel; on flour from 78 cents to \$1.04 per hundred pounds; but the duty on bran and other by-product feeds was decreased from 15 to 7½ per cent ad valorem.

The statement from the White House, issued in connection with the formal proclamation of the change in duty rates, and being part of the official notice, said, in part:

"On the basis of the record of the Tariff Commission's investigation the President finds:

"1. That principal competing country in the case of wheat, wheat flour, and mill feeds is the Dominion of Canada.

"2. That in the case of wheat the difference in cost of production between the United States and the Dominion of Canada is 42 cents per bushel of sixty pounds.

"3. That in the case of flour, the difference in costs of production between the United States and the Dominion of Canada is \$1.04 per hundred pounds. This consists of elements, the one an amount designed to compensate the millers for the duty which they must pay on wheat imported into the United States and the other, to cover the difference in conversion costs in the two countries.

"4. The difference in costs of production of mill feeds between the United States and the Dominion of Canada is \$0.003 per 100 pounds."

The formal declaration in regard to the duties was as follows:

"Now, therefore, I, Calvin Coolidge, President of the United States, do hereby determine and proclaim that the increases and decreases in the rates of duty provided in said act shown by said ascertained differences in said costs of production necessary to equalize the same as follows:

"An increase in said duty on wheat from thirty cents per bushel of sixty pounds to forty-two cents per bushel of sixty pounds;

"An increase in said duty on wheat flour, semolina, crushed or cracked wheat and similar wheat products not specially provided for, from 78 cents per hundred pounds to \$1.04 per hundred pounds;

"A decrease in said duty on bran, shorts and by-product feeds obtained in milling wheat (within

the limit of total decrease provided for in said act) from 15 per centum ad valorem to 7½ per centum ad valorem."

WHEAT COUNCIL DISBANDS BUT WORK CONTINUES

The functions of the Wheat Council of the United States in promoting the greater use of wheat foods will hereafter be conducted from the offices of the American Institute of Baking, at 1135 Fullerton avenue, Chicago. The Council itself, which was organized to relieve the distress among farmers due to over-production of wheat in 1922 has given up its offices in Chicago, it was announced on March 1 by Hon. Sydney Anderson, its chairman. The Council was formally disbanded, but Dr. L. A. Rumsey, who was "loaned" to the Wheat Council from the American Institute of Baking staff, has returned to the Institute, together with all papers and records having to do with the National Toast Campaign and the Eat More Wheat Campaign.

These campaigns, with all others the Wheat Council had under way, will now be carried on as part of the Institute work. These plans include getting out a motion picture of wheat foods for display in schools, and for preparing lectures to be given before home economics teachers and others who wish to know about the rôle of wheat in the human diet.

In formally terminating the work of the Wheat Council itself Mr. Anderson stated that it had "accomplished its purposes, as it had focused the attention of the whole country on the wheat problem and had seen the development of relief measures which give promise not only of meeting the present emergency in the wheat states, but also of re-establishing wheat growing on a permanent and profitable basis."

The Wheat Council was organized at a mass convention of farmers, millers, bakers, and other groups having to do with the handling of wheat, flour, and bread. The convention met at the Sherman Hotel in June last, and appointed a committee to organize the Wheat Council. Before it closed its offices the Council saw to it that a \$10,000,000 financial corporation was formed to stabilize business in the wheat territory and offer other relief of both a governmental and private nature.

HINTS FOR THE ELEVATOR MAN

BY R. SCOTT HILL
SPlicing

I doubt if one elevator man in 20 can splice a rope, and yet the method of doing it is very simple and the knowledge extremely handy and often quite valuable. The transmission rope is a most satisfactory means of transmitting power to the head of an elevator, and while it will run for years if shafting and pulleys are properly trued up, there is a possibility of the rope breaking at some time when it is urgently needed. At such a time, a knowledge of splicing will enable the operator to have his elevator running again in a matter of a couple hours' time.

Most diagrams on the subject depict the splice being made with two strands at a time. This is, perhaps, a better and more rapid way for one who is expert at the work, but for one who splices only occasionally, it is much easier and less confusing to work a single strand at a time.

Twelve feet of rope should be used for a splice. Measure back 6 feet from each end and there tie with twine—adhesive tape is even better. Now unravel back both ends for 6 feet to where tied. Next crotch or dovetail the strands, from opposite ends, together, and cut out the core at center of splice. Now remove tape or twine from one side of splice, and take strand from one end and unravel corresponding strand from other end, fitting strand into groove thus made. Continue this for four feet six inches, and there temporarily tape or tie both strands to hold them in place. Take next corresponding strands and repeat operation for two feet three inches.

Follow same rule on other side of center of

splice, which center should be tied or taped; both as a marker and to hold strands in place until the splice is completed. When above instructions have been completed, two joinings will show on either side of center, and from these joinings will hang strands of about a foot in length. Unlay these back for nearly a foot both ways, then count number of yarns in strands and separate in half, allowing one half to hang and fitting other half into groove thus made back to joining, there meeting other divided strand and cross-tying them so as to fit snugly into groove. Now insert marlin-spike under divided strand and pass half of strand, from other side of joining, under. Continue this back to place of division. There make second division of strand and pass on either side of end which was allowed to hang. Now take marlin-spike and insert under next two strands and pass hanging end through this, locking ends. Repeat on other side of joining, and so on with other three joinings. In every movement, draw very tight.

The writer has used the above method quite often, and the splice has never failed to hold. Of course, where the rope after breaking is not long enough and it is necessary to add another piece, two splices will be required. In that case, allow 12 feet for each splice besides the extra length of rope to be added.

QUESTIONS AND ANSWERS

J. H. C.—If you bought 100 bushels of Timothy seed from a farmer which was to be brought in and cleaned, and he later sold the same seed to a track-buyer because the latter would take the seed without cleaning, you did wrong in accepting the farmer's excuse that he did not understand at the time of making the contract that the seed was to be cleaned. When you make a contract, carry out your end of it, and see that the other fellow does the same with his. It is the general custom with elevators to clean seed as it is taken in, and there is no doubt that the farmers in your community were all aware of this. Had you forced this man to fill his contract, you would have found that the other farmers would have backed you up,—if for no other reason than the fact that this farmer would be sure to go around bragging that he had made a better sale than the rest. Insist upon the fulfillment of a contract if you have to go into court to do it.

OPERATOR—You may easily free yourself from the worry of the heavy weights falling from the transmission-rope idler and hitting someone. There is no need to have the weights fastened away up close to the idler. Suspend a rope from the idler, of sufficient length, so that when the weights are attached they will clear the floor by just a couple of feet. They will do the work just as well at this height, and the danger of anyone being hurt will be entirely eliminated.

BETTER WHEAT VARIETIES

Since the country opened its ears to the farmers' cries of distress a great deal of constructive work of an educational nature has been done to enable the farmers to secure greater yields of wheat per acre or to leave the cultivation of wheat for more profitable crops. A great many farmers are more interested in getting aid from the Government, or the paper profits promised by pool promoters, none of which have materialized in practical trial, so it is a question how long it may be before the farmers as a whole adopt the seeding and cultural advice that has been given to them.

Along this line the experiment station of the University of Idaho has been doing some valuable work with Federation wheat, imported from New South Wales, Australia. Over a four-year test Federation has outyielded Dicklow wheat by an average of 5.5 bushels per acre, and Dicklow is considered one of the best yielders in the Pacific Northwest. Farm trials have shown the Federation to have stiff straw and early maturity. To increase the wheat yield 5.5 bushels per acre, would eliminate most of the complaints of the farmer, so if the variety is not widely adopted, it will be the fault of Mr. Gooding rather than the University.

ANDERSON OPPOSES RADICALS

A belated wave of protest against enactment of the pending McNary-Haugen export corporation bill which began with Oklahoma and Kansas farmers has swept the entire grain and livestock belt. It remains to be seen if it is in time to be effective.

Sharp division is shown among farmers of the Northwest where the measure was supposed to have had the solid support of agriculture. Congressman Sydney Anderson's warning that the "unworkable" law would only bring further grief to the American farmer is reported to have almost completely turned the tide against the bill in the Northwest.

Congressman Anderson, who has been a leading figure in Congressional agricultural activity in recent years, takes a stand similar to Secretary Hoover's in opposing the bill. Washington reports indicated that President Coolidge would in the end oppose the measure.

"In the first place," said Congressman Anderson's complete statement, made public in Chicago on March 7, "the provisions of the bill are not confined to wheat, but apply as well to flour, corn, raw cotton, wool, cattle, sheep, swine or any of the food products of cattle, sheep, or swine. Our exports of corn, cattle, sheep and swine as such virtually are negligible. With respect to cotton, the ratio price would be below the present prices, so that very little advantage could come to the producer. No one even has attempted to show how this bill can be made applicable to hogs and cattle in such a way that the farmer will receive any benefits from its operation.

"It is quite clear that the bill has no real application, except to wheat and that the remaining products are put into the bill for political purposes only, in the hope that some Congressmen and farmers will be fooled into believing that they are going to get some advantage out of the passage of this legislation. For some reason or other, the authors of this bill omitted to include in its provisions rye, oats and barley, although they should have known that in the principal countries to which we export wheat, rye is used to a very large extent interchangeably with wheat and the price of wheat is affected very directly by the price of rye.

"The fundamental weakness of the bill lies in the fact that it assumes that the price of agricultural commodities should be made by the price of other commodities. We cannot have a ratio price for wheat, for example, resulting from a calculated relationship between farm products and all commodities, without having the ratio price of wheat depend entirely on the status of the all-commodity index.

"The leveling of prices is a process in two directions, not in one only, and to re-establish the relationships between farm prices and other prices it is necessary not only that farm prices come up, but that other prices come down. This process has been and is going on and still continues to do so to the ultimate benefit of the farmer if he is not induced to follow the price fixing rainbow chasers.

"The idea that the price of a farm product or group of farm products can by a miracle of government action be made to bear a continually definite relationship to the ever changing and uncontrolled prices of other groups of commodities is a fallacy.

"An analysis of the figures submitted by the Bureau of Agricultural Economics of the Department of Agriculture shows that this ratio price will fluctuate from month to month and inasmuch as the bill removes all possibility of hedging, these fluctuations will tend to destroy all stability in the grain business. Indeed the bill makes it absolutely impossible for one who buys wheat on a ratio price one month not to lose money or make money if he sells it on the ratio price of the next or some other month.

"Where is the ratio price to be applied? Is it to be based on New York, Chicago or some other

point or are we to have different ratio prices for all of the terminals and how is it proposed that the ratio price shall be reflected back to the farmer through the local elevator? There are several classes of wheat and several grades within each class.

"The whole ratio price proposition is absolutely unsound, impracticable and unworkable; it would be far better and far easier in my opinion, to establish a fixed price and undertake to maintain it through the crop year and it would be just as fair to everybody concerned.

"No miller can afford under this bill to take chances which this price ratio proposition imposes on him, consequently the miller's purchase of wheat will immediately be reduced to a hand to mouth basis, that is to say he will only buy wheat as fast as he can get orders for flour at a price which will make him whole on what he has to pay for wheat.

"Please let me make it clear in this connection that I am not worrying about what will happen to the miller under these circumstances; he will take care of himself. What disturbs me is what will happen to the farmer when the miller and the grain dealer expands his margin and covers his



HON. SYDNEY ANDERSON

added risks as he will be forced to do under the operation of this bill.

"Now then it is proposed by this bill to pay the farmer for his wheat or other products partly in cash and partly in scrip, which is to be paid for by the buyer of the products at a price stipulated by the commission and delivered to the farmer in lieu of a part of the price he is to receive. This scrip is to be redeemable in a percentage representing the difference between the original amount paid for the scrip by the buyer of the wheat or other specified farm products less the loss made on foreign sales and less the expense of operation of the Government's agencies. As the losses of the commission and therefore the ultimate value of the scrip depend in part on the fluctuation of all the commodity index in this country and the price of wheat abroad, this scrip furnishes a splendid opportunity for speculation. It likewise furnishes abundant opportunity for fraud, especially inasmuch as the penalties connected with the purchase and delivery of the scrip are civil penalties only.

"The idea of maintaining the domestic price above the general world price level is as old as history itself. The McNary-Haugen bill simply clothes the old idea in a new and more complicated dress and by its very complications increased the improbability of its success.

"There is one other consideration which should be mentioned in this connection. The weakness of all price fixing schemes has been that the fixed price, if high enough to do the farmer any good, has always resulted in increasing the production

of the product. It is conceivable, of course, that if this bill were applied to all of the products mentioned in it and they were all simultaneously raised to relatively the same position no change would take place in the relation of acreage sown. But it is perfectly obvious that the bill never will be applied to all of the commodities specified by bill or any considerable number of them.

"I am as anxious as anyone to do whatever can be done by Government action to relieve the unfortunate and the difficult situation in which I know the farmer is, but the farmer cannot be helped by unworkable and impracticable schemes, however plausible they may seem in theory."

PREPAREDNESS

BY TRAVELER

It's getting along to the time of year when the elevator man should begin to think about looking over his elevator to see just what is needed in the way of improvements and repairs. Little things neglected finally bring a greater strain upon other more important parts, and eventually mean big and expensive repairs where minor ones should have sufficed.

It will not be long now, until the farmers will be getting into the fields, and once the spring work is on in earnest, there will be little grain coming to the elevators. That will be the time to start in and make a systematic inspection of the elevator from cupola to sink. If done in this manner, you'll be surprised to find how many things need some attention.

If you've been elevating ear corn into your cribs, you may have had to make frequent trips to the head of the elevator to clear up a choke. An inspection of the spouting there may reveal that the metal lining has become worn and torn, thus causing the ears to stick and choke up the spout. A few strips of new metal will relieve you of all this extra trouble and annoyance.

Then there is the elevator leg from which buckets have been torn off occasionally. This may have happened oftener than you had thought, and an examination may show that, for this reason, you are losing time and power when loading cars or elevating grain. The belt may also be dragging on either side of the leg. This will require extra power, besides increasing the fire hazard.

A belt requiring frequent lacing is usually a belt which is worn out. Stopping to lace a belt means keeping a customer waiting, as these things only occur when the elevator is in operation. A new belt may prevent several customers changing to a better equipped house. Don't take that chance.

A worn sprocket on your corn drag will cause the chain to jump off frequently. That also means a long stop while you clear a choke. It will continue to happen until the worn sprocket is replaced with a new one.

If your turnhead is not working properly, you can easily get the various kinds of grain mixed up. This also means more or less of a loss. If the turnhead is examined carefully in your leisure time, the trouble can be discovered and the proper adjustment made.

Slipping pulleys and belts are a great annoyance, and where they are driving the cleaner, for instance, it means slowing up the action of the house so that it cannot do proper work. Failure to clean the grain properly will be reflected in the Profit and Loss account at the end of the year.

The foregoing are just a few examples of what may be found during a careful and deliberate inspection of any elevator that has been running for some time. Daily use of the various parts is apt to make one insensible to the fact that they are not up to their proper efficiency; but when one sets aside a special time to look them over, the defects will show up readily enough.

GRAIN interests in Canada are investigating the possibilities of Prince Rupert, western terminal of the Grand Trunk Pacific, as a site for an export elevator, as Prince Rupert is 500 miles nearer Japan than is Vancouver.

Cleaning Wheat at the Thresher in 1923

Further Experiments With Disc Recleaners Show a Large Profit
in the Use of This Equipment*

THE Secretary of Agriculture, in his report on "The Wheat Situation" transmitted to the President on November 30, 1923, states in

In the northwest Spring wheat region heavy and unnecessary losses are sustained by wheat farmers in growing and putting on the market wheat containing a large amount of foreign material which can be removed. According to records of the Minnesota State Grain Inspection Department dockage has gradually increased from 1.9 per cent of all wheat shipped to Minnesota markets in 1902 to 4.2 per cent in 1922. During the 21 years covered in this period it is estimated that almost 110,000,000 bushels of dockage were shipped to these markets. If shipped separately to market, this dockage, it is estimated, would have required over 84,000 freight cars for its transportation. Farmers of the Northwest shipped to Minnesota markets in the crop year of 1922 alone over 7,500,000 bushels of dockage, using for this purpose about 5,800 cars. Had this equipment been available for the shipment of clean wheat, the car shortage in the Northwest in the crop movement season of 1922-23 would no doubt have been less serious. It should also be observed that market receipts do not fully measure the amount of dockage since a part of it is removed at the farm and at local elevators.

The percentages of dockage shown in the accompanying chart does not include all of the dockage produced in Spring wheat because part of the dockage

per bushel as a result of the cleaning.

Experiments have been carried on for several years to build a cleaner suitable for use at the thresher, in the Central Northwest. To clean grain satisfactorily as part of the threshing operation requires a cleaner of large capacity which will remove the dockage and other foreign material without appreciable loss of grain, and to do this as fast as the grain is threshed.

The portable disc type cleaner designed for the 1923 experiments was found to be well suited for cleaning wheat and rye as part of the threshing operations in the principal Spring wheat states. The portable type of disc cleaner was evolved from the experiments during the two previous years with the deck type of disc cleaners.

The portable disc recleaner was operated during 1923 in connection with various threshing machines located in South Dakota, Minnesota and North Dakota. The recleaner was moved to various districts in these three states so that all kinds of conditions, types of threshing machines, and varieties and amounts of weed seeds would be encountered.

Records were kept of all the wheat and rye that

was raised because most of the "foreign material other than dockage" was removed in the cleaning operation. In one lot the grade was raised two grades or from grade Number 4 to grade Number 2 on this factor alone.

"The test weight" is the principal grading factor in determining the numerical grade of wheat. The wheat after passing through the portable disc recleaner was higher in test weight in every instance than the same wheat before it was put into the recleaner, although the test weights in each case were determined on the wheat after removal of dockage by the dockage tester in accordance with the Federal grading rules. An average increase in test weight of 1 pound was secured on the wheat, and an average increase in test weight of 0.7 pound was gained on the rye as a result of cleaning. This increase in test weight was sufficient to raise the grade on eight of the 14 lots of wheat and to raise the grade on one of the lots of rye.

The average test weight of the uncleaned threshed wheat in which the test was made before removing the dockage, was 52.4 pounds. The average test weight of the cleaned grain was 55.4 pounds, or a higher test by exactly 3 pounds in favor of the cleaned wheat. This fact has important bearing on the storing and hauling of wheat because the 2150.42 cubic inches of space occupied by a measured bushel of wheat should be filled with wheat and not by wheat and dockage.

A lot of wheat containing 15 per cent dockage has a test weight of but 52.4 pounds, and therefore the bushel measure will hold only 44.5 pounds of wheat, the remaining space in the bushel measure being occupied by the dockage. The space occupied by the wheat in this case is slightly less than three-fourths of a bushel by measure. The farmer who has 15 per cent dockage in his wheat is therefore able to haul only three-fourths of a normal load of wheat because one-fourth of the wagon box space is occupied by dockage, whereas if he were marketing clean wheat, his wheat hauling capacity per load or per day would be increased one-third.

The amount of grain lost in the screenings removed is one of the real indicators of the efficiency of any cleaner. The elevator operator who buys uncleaned wheat and then cleans it ordinarily loses in the screenings about 1 per cent of the net wheat. The efficiency of the portable disc recleaner is such that only 4/10 of 1 per cent of the wheat was lost in the screenings.

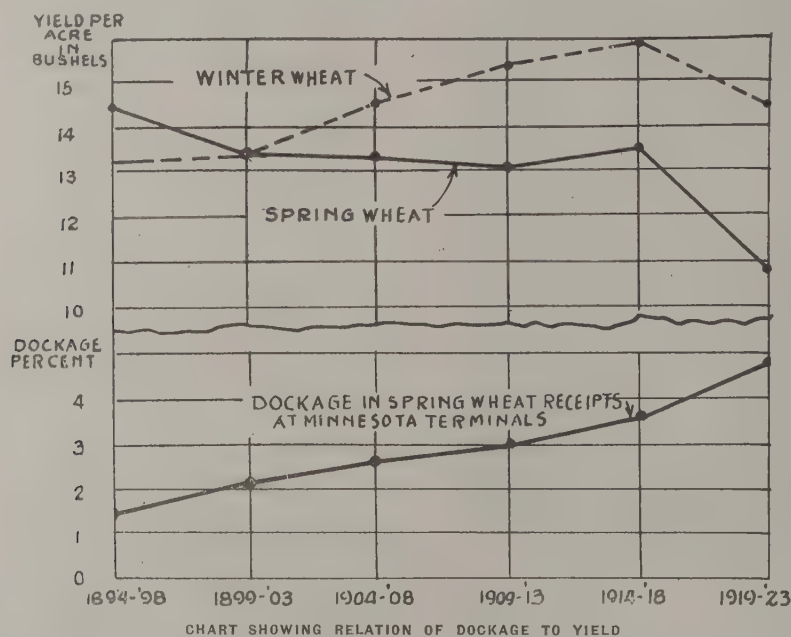
An average increase in price of 2½ cents per bushel was offered for the cleaned over the uncleaned samples in the case of the Hard Red Spring wheat, an average premium of 3 cents per bushel was bid for the cleaned Amber Durum; no premium was bid for the cleaned Red Durum because the grade remained the same and also 1 per cent dockage remained in the cleaned sample; an average premium of 4½ cents was bid for the cleaned Mixed wheat, one lot of which had been raised two grades by cleaning; and for the cleaned rye a premium of ½ cent per bushel was bid on one lot, no premium being bid for the other two lots.

While the average dockage on the grain before cleaning was slightly below the average for the sections where this wheat was grown, the saving in freight alone by shipping the cleaned wheat amounted to 1.2 cents per bushel. All of the wheat shipped had a freight rate of 12 cents per bushel or less. Many farmers in the Spring wheat states have freight rates higher than 12 cents per bushel and would therefore gain even more per bushel by cleaning their grain before shipment.

The screenings were assigned a farm value of \$10 per ton, although mill oats were worth \$17 a ton and fine seed screenings were worth \$14 a ton in Minneapolis at the time.

The saving as a result of the cleaning with the portable disc recleaner was at least 7.3 cents per bushel, and allowing 2 cents a bushel for the cost of cleaning, the net gain received by the farmers was 5.3 cents per bushel.

It is expected that a limited number of the portable disc recleaners will be completed in the near future and that they will be available for the use of farmers in the Spring wheat states during the 1924 threshing season.



is removed at the country elevators before the grain is shipped. A survey based on the reports of 1,400 elevators in Minnesota, North Dakota, South Dakota and Montana showing the percentage of dockage in the 1923 crop of Spring wheat marketed by farmers up to November 1, indicate that the average dockage in North Dakota wheat this year is 11.3 per cent, in Montana 2.5 per cent, in South Dakota 7.7 per cent and in Minnesota 7.2 per cent. The total wheat dockage produced in these four states is 7.6 per cent by weight of the 1923 spring crop. This means that 11,650,800 bushels or the equivalent of 13,980 carloads of dockage were hauled in the wheat to the country elevators in the Central Northwest. The farmers should have cleaned out and used at least a large part of this dockage for feed on the farm. In one state, the average wheat farmer harvested, threshed and marketed a half peck of weed seeds with every bushel of wheat.

If this dockage had been removed before marketing, the Spring wheat farmers, in South Dakota, Minnesota, and North Dakota who cleaned their wheat before marketing gained at least 7.3 cents

was threshed and cleaned at the various locations. Seventeen lots of grain comprising 6,205 bushels of Hard Red Spring, 1,150 bushels of Amber Durum, 600 bushels of Red Durum and 5,000 bushels of Mixed wheat, and 2,800 bushels of rye were cleaned with the portable disc recleaner as part of the threshing operation.

Fourteen lots of wheat containing from 3 per cent to 15 per cent of dockage were cleaned. One of the lots containing 15 per cent dockage was Durum wheat and was threshed at the rate of slightly over 200 bushels per hour. This was the only lot of grain which was not entirely cleaned to a dockage-free basis. This lot after cleaning contained only 1 per cent of dockage which was principally foxtail. A slight change which was later made in the recleaner would undoubtedly have removed the remaining assessable dockage. The other lots of wheat were each cleaned to a dockage-free basis. The three lots of rye containing from 7 per cent to 24 per cent dockage were all cleaned to a dockage-free basis.

The portable disc recleaner, in addition to removing the dockage, cleaned out practically all of the cockle, wild rose and wild peas which function as "foreign matter other than dockage" in the inspection and grading of grain. Such weed seeds are generally referred to as inseparables and when present in sufficient amounts lower the grade of the wheat in which they appear. In nine of the 14 lots of wheat cleaned, the grade of the wheat

*The results of the experiments relating to cleaning grain at the thresher, conducted by the United States Department of Agriculture during 1921 and 1922 have been published in mimeograph form. Copies of these reports may be obtained upon request addressed to Grain Investigations, Bureau of Agricultural Economics, 404 Flour Exchange, Minneapolis, Minnesota.

"JIM DUNN"

BY HOZUS

Jim Dunn, who runs the elevator at Sperry Siding, says: "Some fellers jest think things oughta go th' safe way for years, an' when a change comes along they're done for right away. There's Bill Miller, that's been a'runnin' th' elevator at Bentzville ever since I can remember. Bill dropped in th' other day, an' he says t' me, he says: 'Dunn, what's us fellers a'goin' t' do? This here elevator bizness is 'bout all shottoell, an' here I've spent a lifetime at it.'

"Well, I says t' Bill, 'I ain't a'tellin' ya what ya oughta do, but this is th' way I usely figger them things out. When I've been a'drivin' my ol' flivver over a road for quite a spell an' it gets pretty nigh impass'ble, I start fossickin' around until I find a better road, an' then I travel that as long's it's good. An' that's th' way it is with this here elevator bizness. If th' ol' way seems t' be played out, watch for th' detoor signs an' follow th' crowd. I'm allus willin' t' trust in th' Lord 'till th' britchin' breaks, ennyway; but after that it's a pretty good idee for a feller t' begin t' think for hisself.'

"Bill said he wasn't jest sure, but he reckoned mebbe after he'd thought it over a while he'd be able t' see what I was a'drivin' at."

LITTLE TIPS FROM "JIM DUNN"

It's a good idee t' allus count th' sacks. It'll help t' settle a argument if th' scales seem to be fibbin'. Th' trucks an' flivvers have changed things around a heap, but ya can't beat good sleddin' an' bob-sleds for bringin' th' wheat outa solitary confinement.

A farmer allus wants a dollar for wheat until he can get it, an' then he thinks he's testifyin' in court—an' "falls t' remember."

Ya can can allus learn somethin' new in th' grain bizness—either from th' farm buro officials or th' rural folks in Washin'ton.

After a cupla winters in a elevator, a feller oughta be fit for North Pole work.

A trade paper won't tell ya much about ettyket or fysical culture, but it'll tell ya a heap about th' elevator bizness.

When a farmer starts intimatin' that ya're not givin' him all that's a'comin' t' him, there's jest two things t' do. Either say it with bricks or keep your mouth shut.

Half th' people in th' elevator bizness, jest now, are wonderin' how th' other half is a'managin' t' live.

When ya got your car almost loaded an' th' transmission rope breaks, what's a feller a'goin' t' do? What ya should a'done afore—get a new rope.

There's nothin' makes a friend of a elevator man, like th' words: "check to balance herewith."

Ya can lead a farmer t' your elevator once, mebbe; but if ya don't satisfy him, ya can't allus make him come back.

A driveway paved with new inventions, will bring in th' farmers quicker'n one paved with good intentions.

OCEAN FREIGHT RATES

The recent fight between the ocean carriers on one hand and the packers and the Secretary of Agriculture on the other, relative to the proposed increase in rates on meat products, has drawn attention to the fact that a steady upward trend in the freight rates on wheat and flour has been noted since last September. The present rate on wheat from New York to Liverpool, which has been in effect since February 4 of this year, is at the rate of 9 cents a bushel, according to the prevailing rate of exchange. The rate in January of this year was 7 cents a bushel, as compared with 6 cents a bushel in January, 1923. The average rate for the year 1923, however, was only 5 cents a bushel, as compared with 7 cents a bushel in 1922 and 6 cents a bushel in 1913.

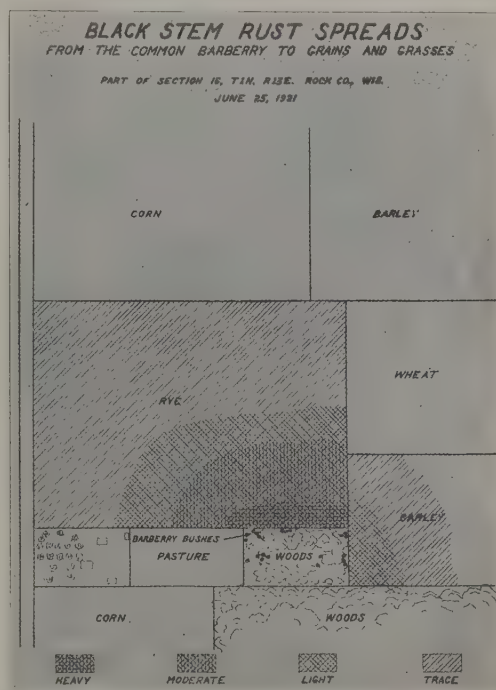
The present rate on flour from New York to Liverpool is 22 cents per 100 pounds, as compared with 19 cents in December, 1923, and 15 cents in September, 1923. The rates for the corresponding

months of 1922 were 16 cents in September and 19 cents in December, which would indicate that the increases noted in both wheat and flour, in part at least, reflect a seasonal trend rather than a general upward trend.

FIGHTING RUST IN WISCONSIN

The fight to control black stem rust by eradicating the barberry, which serves as its winter host, is making good progress in Wisconsin, according to State Department Bulletin 55, although the task is much greater than was supposed at the time of the original surveys in 1918. The barberry was introduced into Wisconsin from New England in 1836 and later became widely used as hedge. Up to date the bushes have been found on 7,580 properties, and of the 3,354,155 bushes found 2,788,936 have been removed and destroyed.

It is not quite clear in the minds of many people just what is meant when we say the barberry serves as a "winter host." The rust spore, when released in the spring, settles on the stem or leaf of wheat and develops into a red pustule, filled with a fine



SPREAD OF RUST FROM THE BARBERRY

Map showing the spread of black stem rust from common barberry bushes growing wild in a pasture and wood lot on Section 16, Township 1 N., Range 13 E., Rock County, Wisconsin, in 1921. The density of shading shows the severity of the rust infection on rye and barley. Notice that the wheat was not rusted indicating that only the rye-barley strain of rust was present.

red dust, every grain of which is a separate spore which can start an infection in a new plant. When the grain begins to ripen red spores are no longer formed, but in their place heavy black spores, which do not produce rust on other grain but serve to carry the rust plant over the winter. The red spores cannot withstand severe winters and die, and if black spores fall on other grain or on the ground they also die, but if they light on a common barberry and gain entrance to its young growing parts, they live and produce thrifty little rust plants for the next season. On the barberry leaves yellow patches are formed by the rust and from these patches yellow spores spread the rust back again to the grain, producing the red rust pustules on the stem and leaves. This completes the life story of the black stem rust.

Thus do we see that there are three different forms in which we may find the black stem rust. During the early part of the summer we have the red form on the grain. This spreads the rust from one grain plant to the next. As the grain ripens the black form develops and this is able to live through the winter on the stubble and straw and to infect the barberry in the spring, producing the third or yellow form of the rust. From the barberry the rust returns to the grain only in the spring.

The black stem rust of all grains is caused by

the same species of rust fungus, which is named *Puccinia graminis*. There are, however, several so-called specialized strains of the fungus each capable of attacking only a limited number of grains and grasses. For example, the stem rust strain of rye, barley, quack grass, and certain other grasses cannot attack wheat or oats. The stem rust strain on wheat attacks wheat, barley, squirrel-tail grass, and certain other grasses, but cannot attack rye or oats. Similarly, the stem rust strain on oats attacks oats and certain grasses but cannot attack rye, wheat, or barley. Barley is the only grain that is subject to the attacks of more than one of these stem rust strains, for both the rye and wheat strains may attack barley. On the other hand, barley is the only grain which does not have a stem rust strain specialized chiefly on itself.

All of these various specialized strains of black stem rust can infect the common barberry in the spring by means of their black spores. And then in turn, each strain can spread from the barberry back to the same grain or grains and grasses to which it is specialized. That is, the specialization remains the same, even after infecting the barberry; so that if the rust on the barberry came from black spores produced on oats it could return to oats but could not cause rust on wheat or rye. This explains many cases where rust has attacked a field of one kind of grain and not neighboring fields of other cereals.

In addition to black stem rust, or "black rust" as it is frequently called, there also are leaf rusts which occur on the various grains. These leaf rusts are often confused with black stem rust. They are, however, entirely different and are caused by other species of rust fungi. These leaf rust fungi do not attack the barberry nor do they usually cause serious losses of grain among Wisconsin farmers.

Leaf rusts usually can be distinguished from black stem rust by their position on the grain plant and by the size and shape of the spots they produce. The leaf rusts occur only on the leaves and leaf sheaths of the grain, and the spots produced are quite small and usually round. Early in the season these spots are filled with an orange-yellow, powdery substance, but later in the summer they may appear grayish-black. The black stem rust, on the other hand, develops on both the leaves and the stem of the grain. The spots are long and filled with a brick red powder or, later in the summer, with a black powder. The skin of the grain plant breaks and curls back from the rust spot. This is the rust which causes the most severe damage to the grain and also attacks the common barberry.

SWEET CLOVER AND WHEAT

"Sweet Clover, often considered as a weed and a despised legume, is not only an excellent pasture and hay crop, but it is one of the best soil builders known," says H. M. Bainer, Director of The Southwestern Wheat Improvement Association. Commenting further, he says, "This wonderful plant is adapted to dry land farming as well as to humid farming. When given a place in a rotation system with wheat, Sweet Clover will insure higher yields and better quality and will cut down the cost of production."

"Wheat growers are realizing, more and more, that if they continue to produce wheat profitably, they must grow more legumes like Sweet Clover, Alfalfa, cow peas and soy beans. Legumes of this kind are the only plants that have the power of removing free nitrogen from the air and storing it in the soil. Nitrogen is absolutely indispensable to a highly productive soil and if it is not restored through legumes, it must be replaced, at considerable expense, through barn yard manure or commercial fertilizers. Nitrogen is not only necessary to the production of big crops of wheat but it also plays an important part in growing wheat of a high quality. Recent determinations have proven that the protein content of wheat is largely controlled by the nitrogen content of the soil."

"Sweet Clover can be sown with wheat, oats or

barley in the spring and under favorable conditions will produce a good stand the same season. Sweet Clover can be started more easily than Alfalfa and in many places where Alfalfa will not grow. There is no other crop better adapted for building up thin and poor soils, also for sections where the rainfall is limited and too dry for Alfalfa and Clover. For the best possible results of soil improvement, allow Sweet Clover to make a rank growth and plow it under, late in the fall, while it is still green."

MONTREAL LEADS IN GRAIN EXPORTS

Montreal again leads all Western Hemisphere ports in the amount of export grain handled. M. P. Fennell, general manager of the port, recently issued in a statement in which he said that total grain exports for the year 1923 reached 144,498,772 bushels. During the first 10 months of 1923, Montreal handled 104,375,023 bushels. Last year, due to abnormal conditions, the port handled 155,035,817 bushels. In the 10 months under review New York handled 77,769,000 bushels, a difference of 26,606,023 bushels. Baltimore was next in importance as a grain handling port with 39,233,000 bushels, followed by Philadelphia with 29,465,000 bushels; New Orleans, 18,977,000; Galveston, 10,349,000; Boston, 5,915,000; Norfolk, Va., 3,424,000; Port Arthur, Texas, 1,409,000 and Newport News, 144,000. It is interesting to note that the quantity of grain exported by the port was almost as great as the volume handled by all American ports, with the exception of New York, on the Atlantic Seaboard.

Mr. Fennell said that up to and including November 24, a total of 1,056 vessels, of 3,631,567 net tons, had arrived from trans-Atlantic and lower St. Lawrence ports, as against 1,184 vessels, of 3,902,729 net tons, during the same period of 1922. Not included in this year's total was a number of ships which arrived from trans-Atlantic ports for permanent service on the Great Lakes. The number of vessels which arrived from lake ports up to and including November 24, was 5,426, of 7,960,464 net tons, as against 5,789, of 9,157,062 net tons, during the whole season of 1922. Of arrivals from trans-Atlantic ports, British ships formed the great majority, with Norwegian ships second, Dutch third and Italian fourth.

An especially satisfactory feature of the season's grain traffic, Mr. Fennell added, was that this year's large total, which was considerably in excess of that handled by any other port on this continent, was reached without the aid of any such abnormal circumstances as those existing in 1922, when the Pennsylvania coal strike, which tied up railway cars in the United States, and the rate of exchange, operated to the advantage of the Montreal route.

"In 1923 these conditions did not exist," said the port manager, "and we can justly claim that the present satisfactory situation is due solely to the ascendant position of this port in the business of grain exporting and the realization of that fact

by the trade. This year's business shows more definitely than ever that Montreal is easily the leading grain-exporting seaport of the world."

CONGRESSIONAL BUNK AND THE WHEAT GRADES

Secretary Wallace slipped badly when he advocated the McNary-Haugen bill, but he showed a degree of independence of the opinion of the Northwest and a clear insight into the dishonest methods of some members of Congress from that section when he spoke recently at a farmers short course in the University of Minnesota. He said:

"Since 1916 the Department of Agriculture has been charged with the duty of fixing the official Federal standards for grains. The wheat grades were made effective in July, 1917. They have been changed three times, materially in July, 1918, slightly in August, 1921, and again in July, 1922. In less than two months after I took office I received a large delegation from Minnesota and the two Dakotas who came to complain of the wheat grades. I listened to different ones for two days. The two secretaries of agriculture who preceded me had held similar hearings and refused to make material changes. At the conclusion of the hearing I decided that the matter ought to be thoroughly investigated, and we have been studying it carefully ever since. Part of the time I have had the help of special committees composed of men not connected with the Department. We have held hearings in Washington and at different terminal markets. We have listened patiently to everybody who wanted to be heard. We have consulted with farmers, with country elevator men, with large dealers at terminal markets, with millers, with exporters, with state authorities—with everybody whom we thought could be of the least help to us.

"The whole purpose of the people in the Department of Agriculture is to establish grades which will enable the farmer to sell his wheat for what it is actually worth and which will be a true index of what the wheat actually is so that all who handle wheat can buy and sell in full confidence that they are delivering and receiving what they think they are delivering and receiving; so that the distant buyer can order wheat of a certain grade and be reasonably sure that he will get the kind of wheat he thinks he has ordered.

"There has been so much criticism of the wheat grades out here it would not be surprising if some farmers have got the idea that we in the Department of Agriculture have fixed the grades in such a way as to defraud the farmer, and that we deliberately refuse to change them for fear the farmer will be benefited. I hope I do not need to tell you that there is nothing to that idea. There can not be found in the entire country a group of men who are working more unselfishly for the farmer, or who are trying harder to be of real help to him. They are especially trained, hard-working, conscientious men who are earnestly trying to do the right thing.

"Most of the criticism of the present grades

comes from this section of the country, and the wish expressed is that the grades should be loosened and widened so that more wheat containing foreign material will come into the No. 1 grade. Now, it ought to be perfectly apparent that calling a low grade wheat by the name of a higher grade does not make it a higher grade and will not get a higher price for it. The result will only be to bring down the average price of all the wheat in that grade and penalize the seller of the better wheat. During the war an arbitrary price was fixed based on No. 1, with discounts for the lower grades. As long as that price continued there was a perfectly natural desire to get all the wheat possible into the No. 1 grade because that would mean getting the price fixed for No. 1. That condition no longer exists. The price now is governed by what the wheat actually is, and in the long run nothing but harm to producers can come from giving it a higher grade than it deserves. Those who bid for wheat on the basis of grade make their bids with a view to having to take the poorest quality which the grade will permit, and the wider the grade limits the lower the average price for the grade. Those who buy on the cash market on the basis of sample pay what they believe the value of the wheat to be to them, regardless of grade. They pay less for wheat which carries much wild peas, king head or corn cockle because it is worth less for bread making and is costly to clean. The farmer who produces good Hard wheat free from impurities is entitled to a better price than the farmer who produces foul wheat.

"The best way to get wheat into the higher grades and thus get a better price for it is to grow a better wheat free from impurities. An investigation made in 1921 showed that in Minnesota and the Dakotas 96 per cent of the farmers visited were drilling with their wheat from 1,000 to 100,000 foreign seeds per acre. Most of these weed seeds could be cleaned out. Why sow weeds with the wheat? They occupy space that the wheat should have. They absorb moisture that the wheat needs. They lower the yield of wheat and debase the grade. Why not clean the wheat before sowing and raise more wheat and better wheat that will grade higher and fetch a better price?

"If the impurities are cleaned out of the wheat before it is sold it will grade higher and sell better. In 1923 we found that farmers in these states who cleaned their wheat before marketing gained on an average more than five cents per bushel. We have been making some experiments in cleaning at the time of threshing with very satisfactory results.

"Uniform wheat standards are necessary to make trade easy and satisfactory. Grades are abbreviated specifications for the convenience of all who handle wheat beginning with the producer and ending with the miller wherever he may be. They should be broad enough to cover the range of quality and condition of the commodity commonly found in commerce and narrow enough to make it unnecessary to add other specifications to the contract.

"Those who grow inferior wheat or market foul



PART OF THE WATER FRONT AT MONTREAL.

wheat would like the grades widened and lowered in the hope that their wheat will get into a higher grade. Those who grow superior and clean wheat would like the grades narrowed so they will get the higher price to which they are entitled.

"Do not understand from what I have said that I think the present grades are perfect and should not be changed. On the contrary we have a group of competent men working on the matter all the time and trying to find how to make the grades better without doing more harm than good. It is easy to criticize. Some of the criticism is well meant. Much of it is most unfair and a clear appeal to the prejudices of the farmer. One congressman made a severely critical speech but sent me word not to mind it as he wanted the folks back home to know he was on the job looking after their interests. It is too bad that a matter of such importance should be used to further political ambitions.

"What I do want you to understand is that we have the interests of the producers at heart and that we will make changes in the grades whenever we find that changes will be helpful. In the meantime the producer should help himself by trying to grow better wheat and cleaner wheat and properly preparing it for market."

A CALL TO ARMS

The following letter addressed to members of the Grain Dealers National Association by Secretary Charles Quinn, should have the immediate attention of every grain dealer in the country:

To All Members, Direct and Affiliated:

This is one of the most important communications ever addressed to the grain trade! It directly concerns your livelihood! If you do not act immediately upon receipt of this letter then you do not care what becomes of your business or your country!

Of course you have read much about the McNary-Haugen bill in *Who Is Who in the Grain Trade* and in the trade press generally. That bill has been reported out by the Senate Committee on Agriculture and by the time this reaches you it will doubtless emerge from the House committee.

It will then be before Congress for passage. Every farm radical in the House and in the Senate is working night and day for it. What are you going to do about it?

Do you realize what is going on in Washington? Do you know that the farm bloc leaders have thrown voluntary co-operation overboard and that they are now trying, with hope of success, to foist compulsory co-operation on the country?

They say that there are 7,000,000 farmers in the United States and that they can never be brought together through voluntary co-operation! The McNary-Haugen bill would compel them to co-operate!

It would put the Federal Government into the grain business. There is nothing surer than that! It would destroy future trading absolutely. It would create an immense bureaucratic machine, under the control of the Department of Agriculture,

and this machine would completely dominate the grain trade until it would ultimately drive every independent dealer out of business!

It would use the taxpayers' money to advance the cause of state Socialism. It impudently flaunts the Constitution of the United States and lays the foundation for the socialization of all industry! There is nothing in Communistic Russia that is more subversive of personal liberty or more destructive of the inherent right of a citizen to pursue a legitimate calling in a legitimate way!

And yet this bill will in all likelihood pass in Congress! Why, you naturally ask. Because of the cowardice of the politicians. Many of the Senators and Congressmen in the consuming sections are indifferent. They have not yet awakened to the seriousness of the situation. Some of the others think the bill is so unsound and absurd that it cannot pass.

The radical farm bloc see in this apathy their chance. They saw how the labor unions got the Adamson Law, how the big manufacturers got the high protective tariff and how the railroads got the Transportation Act of 1920. They are using the same tactics. Congress is now run by blocs as every member knows, and they intend to get the McNary-Haugen bill on the statute books. They are not concerned in the slightest about its constitutionality. They will "pass the buck" to President Coolidge, and as this is a Presidential year with an election coming on they will dare him to veto it!

And the chances are he will not veto it. He in turn will "pass the buck" to the Supreme Court. And no one knows what that court will do. Perhaps it will repeat its performance in the case of the Capper-Tincher bill.

So you see how serious the situation is. Mr. A. E. Reynolds, chairman of the Legislative Committee of the Association, was in Washington for several days canvassing the situation, and he believes that the McNary-Haugen Bill will pass at this session of Congress!

The bill was prepared in the Department of Agriculture by Charles J. Brand, former chief of the Bureau of Markets. Secretary Wallace is fathering the scheme. Knowing that the country is opposed to price fixing in time of peace the McNary-Haugen bill was written with the intention of camouflaging its price fixing feature. The price to be fixed, under the bill, is a "ratio" price, and this ratio price is to be maintained by taking the surplus off the market and disposing of it in foreign countries on a world level. The scheme is then to increase the tariff on wheat 40 or 50 cents a bushel so as to raise the price on all wheat consumed in the United States.

The Government cannot keep out of the grain business if this bill is passed. The very first thing it would do would be to abolish future trading because future trading cannot exist under a fixed price, whether that price be a "ratio" price or any other arbitrary price. That is not bothering the radicals in Congress in the least because they are Socialists and opposed to future trading anyway. The next thing the bill would do would be to get

into the elevator storage business. Any grain man will understand why. If the "ratio" price is to be maintained by buying wheat when the crop movement is at its height storage must, of course, be secured. Having gone into the storage business the Government would find itself in the domestic wheat business, and from then on it would gradually encroach upon the independent grain dealer until he would be forced out of business.

The authors of the McNary-Haugen bill did not have the courage to prepare a regular price-fixing bill, but they get the same result in a round-about way. They would put the Government into the grain business by the back door. They would try to make the dose palatable to the consumer by telling him that the farmer "must stand the loss on the grain that is sold for export."

The bill gives the Government control over corn, oats, and all coarse grains, as well as cotton, cattle, sheep, swine, wool, etc. A "ratio" price on all such farm products may be fixed by the President when it is shown that an "emergency exists."

The McNary-Haugen bill puts the Government right into the co-operative movement. The bill goes much further than a mere official endorsement. It gets behind the scheme and finances it with a revolving fund of \$200,000,000, and it compels every farmer to join! It is in reality a gigantic Government pool financed with the taxpayers money!

Think what that means! If the Government can appropriate money to finance farmers why not labor unions, automobile manufacturers, or coal dealers? What is the difference? Where will this thing stop? Present day Communism in Russia goes no further than this!

What becomes of our boasted "private initiative" under a Government that appropriates millions of dollars to go into business in competition with its own citizens? How long can individual citizens compete with the Government which has all the money and all the power? You know the age-old story of the camel that put its head into the tent! It didn't take long until the body followed. In Russia the cry raised by the Communists was: "All power to the Soviets." In the United States the slogan now is, "All power to Congress." It means the same thing. We are going the way of Russia unless the liberty-loving people of this country awaken. This is your chance to do something to check the movement! This letter is no more sensational than the conditions justify.

In the Senate the McNary-Haugen bill is known as S. 2012, and in the House as H.R. 5563. Don't pigeonhole this letter, or decide to wait until tomorrow to write your Senators and Congressmen. Write to them today and ask them to vote against the bill. Nothing can be as important to you as this! Address the letters to your Senators, "Senate Office Building, Washington, D. C." and to your Congressmen, "House Office Building, Washington, D. C."

While the majority of our readers received this letter from Mr. Quinn direct, there are some who did not, and these, perhaps, are not aware of the importance of the crisis and the need of their aid.



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This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

Official Paper of the Grain Dealers National Association and of the Illinois Grain Dealers Association

CHICAGO, ILL., MARCH 15, 1924

CO-OPERATIVE LOYALTY

LOYALTY of farmers to the co-operative company to which they belong is not general, says E. G. Nourse of the Iowa College of Agriculture. "Out of 504 reports, only 249 managers expressed themselves as feeling that their membership were loyal to the elevator."

Too many farmers' elevators rest in the belief that the nature of their organization assures patronage. Independent elevators in such localities, in fact in most localities, have found that if they give better service than the co-operative house they get the business. Farmers are practical. Unless the co-operative elevator makes it worth his while to haul grain there he takes it to another house. It resolves itself finally into a question of service. A paid manager may take the greatest of pains in carrying out the routine work he is paid to do, but he doesn't lie awake nights thinking up ways he can attract new patrons, as does the progressive operator who has his cash invested in his plant.

And there is another angle to this loyalty business. Hundreds of farmers have subscribed for stock in co-operative concerns, under the temporary influence of organizing spellbinder's oratory, or by reason of undue pressure exerted by enthusiastic neighbors. But when it comes time to haul his grain he remembers that Sam White, the independent dealer, has always treated him fairly, loaned him money when he needed it, sat up with him when his leg was hurt, and has been a pretty good fellow all around. Sam

hasn't made any fortune, either, just a fair living, so he can't have been fleecing the boys as the organizer said. He guesses he will keep on hauling to Sam so long as his price is right.

Here is a case that the co-operative would classify as disloyal, but in reality it is loyalty to an old friendship, an expression of trust in a neighbor's integrity, the very foundation of the mutual faith and understanding that takes all the squeak and grind and friction from the wheel of business. This is the type of "disloyal" farmer who makes the country elevator business one of the most interesting of employments, and gives us renewed faith in humanity and greater hope of the future.

FAKIRS AT WASHINGTON

PROSECUTION of those mixed up in the Teapot Dome scandal is taking precedence of most other business at Washington. This is to be expected, for it is the presidential year and many congressmen are most anxious to impress their constituents with their own innocence in the matter and their scandalized virtue that such things should be. Even without the inevitable taint of politics in the oil investigations, the facts appear bad enough and there should be a thorough housecleaning of all who were mixed up in it. There are a lot of open secrets pertaining to other graft which are coming to light and the smell is getting richer and rising higher every day.

The question arises: How much worse is the man who receives graft money, than the man who prostitutes his honesty and his intelligence for the sake of votes? Secretary Wallace recently told of a congressman who made a severely critical speech against the Federal grain grades, but sent him word not to mind, as he was only seeking to impress his constituents back home. In other words, he was lying to his hearers and cheating his constituents as to his real opinions and beliefs. The law provides punishment for the money grafter; the liar and cheat runs no risk. We are inclined to think the latter is the lower order of insect of the two.

THE BELLS ARE TOLLING

A GROUP of radicals, who for the most part, were elected on the Republican ticket (shades of Alexander Hamilton!) holding the balance of power as between the two regular parties, have all but put the McNary-Haugen bill into effect as law. Mr. Reynolds, chairman of the Legislative Committee of the National Association, says that the bill will pass unless immediate protest is made, because the farm bloc is working hard for it, (it is the most radical measure on the calendar) and the conservatives of both parties are more interested in obtaining in exchange the support of the farm bloc on pet measures of their own, than they are in retaining the fundamental principle and genius of the Republic. Congressional ineptitude and indifference will kill the grain trade as dead as a salt herring; there will be nothing to do but board up the door of the

elevator to the tune of the tolling bells, unless you can arouse your congressman and senators to the danger which is hidden under the pretty phrases of the bill. Secretary Quinn of the National Association recently made this plain in a general letter to the trade.

It won't do a bit of good to wring your hands and cry: "Oh dear, oh dear!" until your flowing tears run all the colors of your necktie together. The only thing that will defeat the McNary-Haugen bill is for you to write or wire your senators and representative that the bill, if passed, will not only put you out of business, but it will saddle on the country the most costly experiment that the Government has undertaken; it will put the Government permanently in the business of marketing all farm crops, and when the expense is deducted farmers will obtain less for the crops and consumers will pay infinitely more for everything they consume. Don't mince matters; tell them what you think. They are your agents at Washington, supposed to vote for your interests and paid with your taxes. Go to it, and the Lord have mercy if you fail.

SELLING HELPS FOR SIDELINES

OUR Feed Department this month contains several articles of the greatest interest to those who carry feedstuffs as a side line and those who contemplate doing so. E. C. Dreyer of St. Louis, for three years president of the Feed Distributors Association, has contributed a short article on "Feeds as a Side Line", which contains a great deal of meat, while the report of the meeting of the Eastern Federation of Feed Merchants has many practical discussions on the merchandising of feeds. We particularly commend to your attention the address of O. E. M. Keller, president of the Feed Manufacturers Association.

The handling of sidelines is an important phase of the country elevator business, for there are few elevators so situated that they can cover their overhead and return even a modest profit by handling grain alone. The selection of sidelines is not, or should not be a haphazard choice. A careful analysis of the needs of your community should be made, and sidelines selected which will make your plant active at all seasons of the year and upon which a permanent repeat business can be built up. Coal, lumber, fence posts, cement and feeds are among the most common lines adopted, but all of them are not profitable in every community. Do not guess, but look over your possible customers and then decide what their needs are and whether you can fill those needs profitably.

While prepared feeds have been found a most satisfactory line to handle, there is no branch of the business which needs more careful consideration. In no other line is success so bound up with the quality of the product you handle. Once a line of feeds is established, the price is a minor consideration compared with results. A high grade feed will quickly demonstrate its comparative economy and it is not hard to convince

a feeder to reorder if his cows have increased their milk flow, the pigs or cattle their weight, or the hens their egg production. It may take salesmanship to make the first sale, but a sale which is made on the price factor alone, has no permanent value. Tie up to a reputable, established line of feeds, handle one line exclusively and then sell that line.

FARM RESERVES

GOVERNMENT investigators found more wheat on the farms than was expected, being some 5,000,000 bushels greater than any of the private estimates. The reports on corn, oats and barley were about as expected. The wheat reserve is placed at 174,000,000 bushels, which is 21,000,000 less than last year and 22,000,000 under the 10-year average. The available supply in all positions on March 1 was 287,000,000 bushels, 13,000,000 less than last year. The greatest deficiency is in the Spring wheat territory, in fact the quantity of all wheat east of the Rockies is not excessive and should not prove burdensome. On the Pacific Coast there are 6,500,000 bushels more than last year, but on the other hand, the demand for West Coast wheat is better than that which would normally go to Europe.

The corn belt has 777,276,000 bushels of corn on the farm or 94,000,000 more than last year. Much of it, however, is of low grade, the percentage of merchantable corn being only 80.6 per cent of the crop.

The oats reserves are 444,810,000 bushels, about 23,692,000 more than last year. Up to March 1, 925,000,000 had been consumed or 55,000,000 more than last year. Barley is assuming more importance as a feed grain and the demand for the grain for feed is taking the place of the former malt market. The barley reserves this year are 44,844,000 bushels as against 42,469,000 bushels last year. Ohio, Indiana and Illinois have larger supplies of all grains than last year. Kansas has only half of last year's wheat supply and the Northwest is woefully short. As a whole the report contained no great sensation, nor was it an important market factor.

A GREAT INJUSTICE

SENATOR James Reed of Missouri was "shown" by Secretary Hoover recently. The Senator tried to juggle a few figures to catch the farm vote of his state, but you have to be a better juggler than Senator Reed is to get away with anything like that under Mr. Hoover's eye.

The Honorable Jim stated that the prices of farm produce were held down by the Food Administration during the war below the level of other commodities and "thus doing a great injustice and deprived the farmers of \$5,000,000,000." Of course this was just a guess on the Honorable Jim's part. If he had stopped to figure it out he probably would have found the loss to be a few cents under or over the even five billion. Think how much more convincing it would have been if he had made it \$4,998,762,841.39. Before a figure like that even Secretary Hoover

would hardly have had the temerity to make a denial. But a casual, careless "five billion" was a challenge, an invitation to get out the little old lead pencil and figure it out. That is just what Mr. Hoover did.

During the two years of the Food Administration the farmers received an average of 118 per cent above pre-war prices, while the average price of all commodities was only 92 per cent above pre-war. In other words, the farmer paid for the things he bought during the war on a price basis 27 per cent less than the levels upon which he sold his produce, compared with pre-war.

Jim was wrong by \$9,642,397,861.18, which only goes to prove that it is wiser to use a pencil than to guess.

THE MORAL HAZARD

ARE you a good moral risk for fire insurance? Don't confuse "moral risk" with the reputation which you bear in your community. A man might have the highest veneration for the Ten Commandments and still be a rotten moral risk, simply because the connection between the two was never pointed out to him.

When you take out a policy the measure of the responsibility which you assume with it determines the insurance rate of the future for thousands of property owners, and the cost of your carelessness might run into thousands of dollars in premiums. Let us then formulate a few commandments of our own:

I. I am Fire, a gift from Heaven and a beneficent servant of mankind when rightly used. But when abused or allowed free reign I am the great destroyer, causing suffering and loss unto the third and fourth generation.

II. Thou shalt not take lightly the hazard of my coming, for such will I seek out and consume.

III. Thou shalt not seek recompense for my visitation without accepting full responsibility therefor.

IV. Remember the period of shutdown and keep it safe. Six days each week shalt thou inspect thy plant, and at the closing hour of the last day there shall be no bearing nor place of friction that shall fail to pass thy scrutiny.

V. Honor the insurance inspector, and try not to keep from his observation any hazard which might endanger thy plant. Neither shalt thou entertain him in the office to the end that he forget to inspect thy plant at all.

VI. Thou shalt not have a defective chimney.

VII. Thou shalt not have defective nor inflammable roof or siding.

VIII. Thou shalt not have dust or dirt on thy floors nor thy walls nor thy ceiling nor ledges or shafting or any place where displacement might cause a fire or explosion.

IX. Thou shalt not smoke nor carry matches into thy plant nor shall any of thy people.

X. Thou shalt not have weeds to grow close to thy plant nor any accumulation of

rubbish to be there, for I am Fire the destroyer, and shall make ashes and smoke of all thy holdings if these commandments be not obeyed.

FIGURES AND A PROBLEM

NO ONE questions the serious financial straits of some wheat farmers, not all wheat farmers by any means, and certainly not all farmers; but a survey of the agricultural returns for 1923 leads to the conclusion that the number in distress is comparatively small. The Department of Agriculture finds that the farmers received \$9,953,000,000 last year for their products of the soil and \$6,111,000,000 for animal products, less an allowance of \$3,860,000,000 for crops fed to livestock. Obviously a great many farmers are well on the path that leads to prosperity. The wheat crop last year was \$148,000,000 less in value than the year before, but such variations in single crop returns are not uncommon. Certainly it is no reason for attempting to upset all economic laws as some of the legislators at Washington are trying to do.

The farm is still a good banking proposition so far as its earning capacity is concerned, but the moral risk in agriculture is getting greater each year. Only a few years ago a farmer who mortgaged his farm, made a determined and usually a successful effort to meet his obligation when due. Now, thanks to the vast extension of Government farm loans and other credit, based on Federal funds, thousands of farmers have mortgaged the future; they are spending money which their sons and their son's sons will have to pay. They have sold their independence, and many have sacrificed their property, for the sake of the temporary ease which their new credit has given. This shifting of responsibility is going to make a grave problem for country bankers and for mortgage investors, as the morale of the farmer has suffered and no one seems to know just how much.

HARVESTING POLITICAL WILD OATS

STATISTICS prove about anything you wish if they are handled adroitly. But however expert as a juggler, it must be rather hard for Senator Brookhart of Iowa to reconcile his jeremiads on the farmers' condition, with the page advertisement which the Iowa Daily Press Association is running in eastern newspapers. This page ad tells the world that there is more wealth per person in Iowa than in any other state in the Union; that the bank clearings in eight of the larger cities of the state in the first nine months of 1923 exceeded the clearing of the same period in 1922 by \$382,000,000; and that there is an automobile for every family of four people in the state.

All the above is undoubtedly true. We admit that Iowa is a great state. But why waste these good pages of advertising on the effete east. A campaign directed at the home folks would be more efficacious and would be far less expensive. We would suggest that

they begin with Senator Brookhart. His utterances have done more to destroy faith in Iowa's buying power than any other one thing. His description of the pitiful condition of the farmer would lead one to suspect that there was scarcely a pair of shoes in the state to say nothing of automobiles. And yet we dare say that a goodly proportion of the 32 newspapers represented in the Iowa Press Association are supporters of Brookhart and his ilk who do more harm to the state than all other influences combined. If the Press would have business truth, then it must also have political and economic truth. There is not room in the same paper for constructive progress and destructive demagogery.

NEW MEMBER FOR TRADE COMMISSION

A VACANCY on the Federal Trade Commission gives President Coolidge an opportunity to lift from that body some of the suspicion and distrust which it has put in the minds of all business men. The work of the Commission has been destructive and obstructive to business of all kinds, and there is no hope of improvement so long as the personnel of the body remains of its present caliber. When the Commission starts an investigation, it does so with the evident intention of finding its victim guilty, and although the courts usually hold the findings of the Commission to be wrong still the proceedings take much time and expense for the firm under review.

It is suggested that pressure is being brought to bear to put a farmer on the Federal Trade Commission. This is pure politics and hardly would need comment were it not for the fact that the farmers seem to be getting about all they set out for. It is to be hoped that President Coolidge uses his native good judgment in the matter and will appoint a business man of sufficient force to counteract in some measure the perverted attitude of the present incumbents.

A HIGHER WHEAT DUTY

A N INCREASE in the duty on wheat from 30 cents to 42 cents a bushel, and on flour from 77 cents to \$1.04 per hundred pounds, was announced by President Coolidge on March 7, to take effect on April 6. The duty on bran and other wheat feeds was decreased from 15 to 7½ per cent ad valorem. This increased wheat duty has been quite an issue up in the Northwest. Now they have it, and no doubt are satisfied. Except for the expenses of the Tariff Commission it will cost the country nothing, collectively or individually.

The farmers do not seem to get the fact that so long as we have a surplus of wheat, domestic consumers do not have to bid against each other, but only against the foreign buyer. As long as we are willing to pay a cent or even a fraction more than the foreign bidder we can keep as much of the wheat at home as we wish.

There is a group of so-called farm leaders who see this wheat tariff as the first step in

the gigantic pool, which will include every wheat grower in the country so that a monopoly will be created and no wheat will be sold to consumers for less than the world price plus the tariff. Before this is effected the farmers will be too busy organizing to raise wheat, and production will fall below domestic requirements. Then the result will be brought about whether there is a pool or not. But until that time comes the increased duty means little, either to the producer or the consumer.

EDITORIAL MENTION

Does the wheat farmer think he is the only man who has troubles?

A difficult approach to the elevator turns many a farmer's wagon toward your competitor's house.

Incomplete and unsystematic records cause the loss of far more time than keeping an up to date set of books.

You didn't get that 25 per cent reduction on your income tax, but perhaps you can cash in on it next December.

Other things being equal the elevator which is neatly painted and free of accumulation of trash around driveways or sides is the one which will get the business.

Grain exports cannot be increased in Europe so long as the finances there are sick. That is the whole trouble with the food problem and Europe seems a long way from solution of the difficulty.

Poincare blames the fall of the franc on Germany, but it is only the logical result of rotten politics in France. The greatest need of that country at present seems to be a statesman who can see farther than the next election.

There are thousands of people who are continually knocking the Government, our economic system, the weather, the land, and their neighbors, but nevertheless this is a great country. It must be a great country, for think how it has thrived and prospered in spite of the men who represent us in Congress.

The Senate defeated the Norbeck-Burtness bill on March 13. This bill provided for an appropriation of \$50,000,000 to aid wheat farmers to diversify their farm activities rather than concentrate on wheat at an annual loss. The defeat of the bill leaves the strength of the farm bloc concentrated on the McNary-Haugen bill, and they will go to any length to get it passed. As a matter of fact the Norbeck bill did not have unified support. One element of the farmers saw in it only an easy opportunity for them to get deeper into debt; another element objected to the prospect of revising their mode of farming so that they would have to work every day instead

of two or three months in the year. It would be much simpler to have the Government guarantee them a profit on their wheat. They fondly believe the McNary bill will do this, whereas in fact, it would do nothing of the kind.

The condition of grain cars as revealed by records of terminal yards has improved materially but there are always a certain number of cars received which show hasty or inexperienced cooping with attendant loss of grain.

The recent debate between Aaron Sapiro and Dr. Magill, secretary of the Winnipeg Grain Exchange, did not prove sensational. Dr. Magill described the grain trade as it is, while the San Francisco lawyer told what he thought it would be under the pooling plan. The grain man presented an incandescent light, perfected to do its work; Mr. Sapiro held up a rainbow whose colors faded even as he talked.

The man who makes an inspection of his plant before closing up for the night rarely find conditions that might cause a fire, because that kind of a man habitually keeps his house in order and an orderly elevator is a good fire risk regardless of the materials of which it is built. This, however, is not an excuse for keeping a shingle roof, for the shingle is a hazard of exposure, beyond the control of the operator.

The system upon which the grain trade is conducted has shown its fundamental strength and soundness by the way it has withstood punishment during the last two years. The trade has suffered, to be sure, and is sick in consequence, but most businesses under similar conditions would be dead and buried. If the principles of the trade had not been right to begin with they could not have stood up under the gaff of criticism and abuse so long.

The great compulsory pool provided for by the McNary-Haugen bill has drawn attention from the voluntary pools. But do not forget that the organizers are hard at it, and in spite of the publicity given the failures of other pools to make good their promises, the spellbinders are said to be making headway in Indiana, Kansas and other states. The Lowden Committee has advanced \$25,000 for preliminary work in Kansas alone and it is expected that \$162,000 will be spent this year in that state.

Senator LaFollette and other members of the farm bloc are so exercised over the price of bread that they have ordered an investigation of the "bread trust." These defenders of the people are scandalized that every manufacturing process doubles the price of the raw materials. They forget that the Department of Agriculture has just published the fact that animal products were worth about \$6,000,000,000 to the farmers last year, and that the grain and hay consumed in producing this value was worth something over \$3,000,000,000. So the farmer also doubled the value of his raw material.

GEO. C. MARTIN, JR.
St. Louis, Mo.

NEWS OF THE TERMINAL MARKETS

E. A. JAMES
Chicago, Ill.

SAMPLING CHARGES INCREASED

The directors of the Chicago Board of Trade at a recent meeting approved the report of the grain committee and sampling charges on in and out cars be raised 10 cents per car, making the charge 50 cents instead of 40 cents per car.

The directors also approved a charge of 15 cents on sampling analysed by the Board of Trade Sampling Department from which the department has never received revenue.

MERCHANTS EXCHANGE IN NEW BUILDING

The Houston Merchants Exchange of Houston, Texas, will shortly occupy a new home, having purchased the old Cotton Exchange Building for that purpose. The market will add to its grain facilities by the erection of a new public grain elevator this year. Officers of the exchange are J. V. Neuhaus, president; Sigmund Rothschild, vice-president; B. F. Arnim, secretary and treasurer.

ELECTION ON LITTLE ROCK GRAIN EXCHANGE

At the recent annual meeting on the Little Rock Grain Exchange, Little Rock, Ark., the following officers were elected: Guy Williams, president; H. Cramer Darrogh, vice-president; August Probst, secretary-treasurer; J. G. Vizard, traffic manager; J. F. Muellen, inspector and weigher. The directors chosen were John F. Weimann, E. L. Farmer, C. L. Gordy, H. K. Cockran and Levi Satterwhite.

VALUES ARE ATTRACTIVE

Receipts of all grain in this market are very light with every indication that condition will maintain for some weeks at least. Advices of shipment from the country as well as other sources, lead to that belief and we confidently urge shippers to consign their grain here, as values in our market are very attractive as compared to most other terminals. Corn today here about 1 to 1½ higher, oats and wheat about steady.—Bert A. Boyd Grain Company, Indianapolis, Ind., Market letter of March 12.

THE GRAIN SITUATION AT CAIRO

The movement of grain through this port so far as export is concerned via the Barge Line exceeded 1,000,000 bushels in February. The March movement will probably be light especially on corn. From a domestic standpoint, movement of corn and oats have been perhaps a little above the average and had it not been for the unfavorable weather conditions existing throughout the territory south, east and west of us the volume would have been very much greater. No plowing or spring work of any kind has been accomplished. Temperatures have been perhaps lower for an extended period than for several years past at this season of the year. Much rain has fallen throughout the territory that this market supplies and this has been a decided check so far as shipments are concerned. With the coming of better weather unquestionably the movement to the entire south will improve in a most pronounced way and business undoubtedly will be of a kind that will be very satisfactory generally speaking.

We continue to get many reports from our southern correspondents, and we have them in nearly every state, telling us that the winter sown oats are in many instances entirely killed out and up to this writing we have not received a single favorable report from any of the territory we cover so far as the winter oats are concerned. Reports gen-

erally indicate very small stocks of feed stuffs from Texas to Virginia and for this reason we have no hesitancy in suggesting the probability of a very heavy demand from that territory as soon as weather conditions become anything like normal.—Cairo, Ill., Market letter of March 12.

EDWIN A. DOERN

The story of a branch of the activities of the Chicago Board of Trade has been written in "The Pit," which was later dramatized and played in the theatre. No play has been written however, other than that dramatization centering about this great mart. Our Broadway producing managers, Edgar Selwyn, George Broadhurst, Lawrence Langner, and others would probably welcome a play in which the interest revolved about the manifold characterizations affecting the present grain trade. These producing managers, we are told, no longer desire the swashbuckling plays requiring century old costumes and manners, as were in vogue a decade ago. They desire rather to have life depicted as it is today, present problems, manners and interests shown upon nature's mirror and for such a play



EDWIN A. DOERN

the Chicago Board of Trade would seem to offer playwrights a fertile field for the expression of their genius.

Of necessity, the play would have to lay its scenes in Chicago and Washington and to include in its characters those great senatorial actors who in default of a more worthy outlet for their activities apparently spend their time in devising plans for harassing and blocking the useful service which for years has been performed by the Chicago grain market. The playwright could find and depict in these Washington characters, ambition, crookedness, malice, hatred, self-interest, plumb-foolishness—almost anything in fact, it seems except a sincere desire to help one's fellowmen.

In the Chicago end of the play we have a member of the Board of Trade whom we wish to suggest for any of the cash grain roles, Edwin A. Doern, a man of splendid parts, of fine sensibility and intellectuality, who has had an honorable career in the Chicago grain trade for upwards of 34 years. He was elected president of the Chicago Receivers Association at the recent annual meeting and was persuaded to sit for our picture which is presented herewith. Mr. Doern is secretary of the Pope & Eckhardt Company, one of the long-established cash grain firms of Chicago which has for

many years afforded the farmer, through the grain dealer, with an active market for his grain. Coming to Chicago at the age of 11 years from Louisville, Ky., where he was born on June 16, 1874, Mr. Doern at first attended the public schools of Chicago and entered the grain business in 1890 with the old barley house of Karl C. Moeller & Co. He remained with them until they retired from business in 1900, when he went with his present firm.

Mr. Doern is now serving his fifth year as a director of the Chicago Board of Trade, having been originally elected to this office in 1920. He has been chairman of the Board's Transportation Committee for the past five years and is now serving also on the Membership Committee, and Violation of Rules Committee. He is also chairman of the Arbitration Committee on grass and field seeds. Mr. Doern lives in Edgewater with his wife and two fine boys aged 21 and 18 years respectively. He has always been very active in Masonic circles, is a 32nd degree Mason and a member of the Shrine.

LESS CORN IN STORE THAN USUAL

Receipts of corn in this market during the past few weeks have been quite large resulting in a considerable accumulation of corn in elevators. From the fact that the movement was late in getting under way, however, there is less corn here now than is usual at this time of year and when receipts let up, as they will do shortly, the normal demand will soon begin to deplete the supplies and it is expected by the time lake navigation opens this market will be bare of corn again. The large proportion of receipts have been high moisture corn which it has been necessary to kiln dry and consequently this grade of corn has been selling at wide discounts.

Receipts of oats have been only moderate but the demand has been far below normal and as a consequence prices have held very steady. Should the usual Spring demand come in the last of this month, it would not take long to clean out local stocks and create a good healthy market for fresh shipments.

The eastern demand for all grains has been extremely dull this winter. Feeding has been unprofitable in many cases from the consumers standpoint and as a result they are buying only from hand to mouth with no immediate prospects of a change in this condition.—J. G. McKillen, Inc., Buffalo, N. Y. Market letter of March 12.

WEAK TONE FOR CASH WHEAT

The cash wheat situation here at the moment takes on a rather weak tone. The movement for the past two months has been very steady and while not large has been adequate to fill up millers' requirements here. This movement to Toledo coupled with the amount of wheat being moved direct from country points to interior and eastern mills has curtailed the demand for wheat from this market for shipments. It has been known for some time that Winter wheat, in Winter wheat producing sections, is considerable over last year but Canada's large crop, a portion of which has been milled in the United States, has to some extent curtailed demand for Soft Winter wheat. This situation may become stronger later, and especially if we have any serious crop damage to spring flour buyers into the market in a large scale.

The situation in corn and oats has been very strong here, but weakness developed in oats the past few days following up the Government report

on farm reserves. The amount of corn at terminals, coupled with the light movement which is fast drawing to a close, has strengthened this cereal and we would not be surprised to see considerable higher prices before May 1.—*C. A. King & Co., Toledo, Ohio. Market letter of March 11.*

BANKRUPT MAY NOT USE MEMBERSHIP

The Supreme Court of the United States rendered a decision recently that a membership upon the Chicago Board of Trade is not an asset of a bankrupt, and must not be turned over to the trustee in bankruptcy for the benefit of the creditors until all the claims of the Board of Trade are satisfied. The decision came as the result of a suit brought by the Chicago Board of Trade against the trustee in bankruptcy of Wilson F. Henderson. It was the contention of the Board that under its rules it had disciplinary control over its membership and could for cause require the surrender of a membership.

PRICES SHOW ADVANCE

Receipts of corn here the past few days have fallen off considerably and, in consequence, prices show considerable of an advance, and prevailing values are now well in line with those in other markets. The industrial demand has been taking all arrivals and very little business has been done for shipment in any direction. Stocks in local elevators are fairly large and industries seem to have a good supply on hand at the present time. However, from now on, we look for very light receipts from the country and surplus stocks in our market will have to be drawn from. The country is selling absolutely nothing on bids, while advices of consignments are very light. As soon as the weather clears up, farmers will no doubt start on their spring work, so we look for a continuation of light receipts for some time to come.

Receipts of oats have been light and prevailing values here have been in line with those in other markets. There is very little demand for the ordinary oats, but oats suitable for seed have been in good request.—*Mueller Grain Company, Peoria, Ill. Market letter of March 12.*

OUR GRAIN SUPPLY

The Government report estimating wheat stocks on farms March 1 as 134,000,000 compared with 155,000,000 a year ago, and stocks in country mill elevators of 90,000,000 against 93,000,000 a year ago, is construed as bearish. It indicates that the domestic disappearance during the past eight months was less than in the same period last year. Year's total supply, including imports, was 905,000,000 compared with 965,000,000 the year before, a reduction of 60,000,000. Exports to March 1 were 120,000,000 against 168,000,000 in same period the year before, a reduction of 48,000,000. Stocks on hand March 1 about 288,000,000 against 295,000,000 a year ago, reduction of 7,000,000 domestic disappearance eight months 497,000,000, compared with 502,000,000 in like period the preceding year. It had been expected that increased feeding would increase the domestic disappearance of the crop. If the Government figures be accepted, there appears to be a comfortable supply for the remainder of the season.

Corn supply for the season, according to Government figures was 3,137,000,000 bushels, against 3,083,000,000 in the preceding season, an increase of 54,000,000. Government figures of March 1 stocks 1,153,000,000 against 1,093,000,000 a year ago, an increase of 60,000,000. Disappearance four months November 1 to March 1 on this basis was 1,984,000,000 against 1,990,000,000 in same period last year, a decrease of 6,000,000. The trade construes the situation as slightly bullish because the supply last year was below requirements and prices advanced much above the present level of prices.

Oats supply for the season, according to Government figures was 1,370,000,000 compared with 1,291,000,000 the year before, an increase of 79,000,000. March 1 farm stocks 445,000,000 against 421,000,000 a year ago, an increase of 24,000,000. Dis-

appearance from August 1 to March 1 was thus 925,000,000 against 870,000,000 in same period the year preceding, an increase of 55,000,000. The trade construed the Government report on stocks as about a stand off.—*Nat. C. Murray statistician with Clement, Curtis & Co., Chicago, Ill. Market letter of March 12.*

NEW HOME OF KANSAS CITY BOARD OF TRADE

Work is progressing rapidly on the new building for the Kansas City Board of Trade and it is expected to be ready for occupancy by the last of this year. It is located at Tenth and Wyandotte streets and will be 13 stories in height. The board has sufficient ground just south of the building for the erection of a garage which will furnish accommodation for 150 motor cars.

The estimated cost of the building is \$1,500,000. The trading room will be located on the top story of the south wing, and will be 142x56 feet, with ceiling 30 feet high.

INDIANAPOLIS BOARD AMENDS RULES

The Board of Governors of the Indianapolis Board of Trade at a recent meeting adopted the recommendations of the grain committee of the organization for two amendments to the rules governing grain, hay and feed.

One amendment provides that "on all sales of grain, hay or feed in cars on track, buyer shall be entitled to 24 hours' time free of car service in which to give order for disposal, except on cars inspected too late to be placed on sale on date of inspection." The other amendment provides that official inspectors of inbound grain will not place samples on the exchange floor of the Board of Trade later than noon of any day.

TOO MUCH ACTIVITY AT WASHINGTON

The receipts of wheat into the St. Louis market during the past few days have been holding up fairly well for this time of year, with a good out of town milling demand prevailing for the offerings of good heavy No. 2 and No. 3 Red wheat. The local mills have been buying sparingly and the elevator demand for this variety has been practically nothing. Hard wheat continues comparatively scarce, with a mixed elevator and mill demand, with No. 2 Hard selling mainly at one half cent over our May.

The offerings of corn are running very light and yet sufficient to supply the daily demand. The local industries have been the principal consumers, with yellow corn bringing a slight premium over white and mixed.

Oats have been meeting a good shipping demand, while the demand for burt and red oats for seed is gradually decreasing. Business generally quiet, with an unsettled feeling existing amongst the trade, due to too much agitation over the proposed legislation at Washington.—*Picker & Beardsley Commission Company, St. Louis, Mo. Market letter of March 12.*

WHEAT LIQUIDATION IN ORDER

When theories are exploded by actual facts as they have been an adjustment is bound to follow that makes the change all the more drastic. The Government reports prove to us that we have as much wheat as we did last year at this time and because our crop was 80,000,000 bushels, present United States supplies have positively eliminated the ideas of shortage. What is more we are not likely to export 67,000,000 bushels as we did last year from January to July and the report of 157,000,000 bushels of Canadian wheat still available for export puts us in line for a much larger carry over next July than we have had. Liquidation is under way and because of market holding for months and which has meant accumulation it is apt to be very severe. At present we cannot see anything but the natural bulges resulting from an oversold pit condition and we favor sales on hard spots.

Corn bulls are much impressed with theories. A pet theory being that last year is going to re-

peat itself. The farm reserves show 60,000,000 bushels more than last year despite assertions that the present crop went into consumption two months earlier. Corn has found great difficulty of late in maintaining advances and we are inclined to look for increased liquidation in corn also.—*Rosenbaum Grain Corporation, Chicago, Ill. Market letter of March 11.*

CHANGES IN MEMBERSHIP

Chicago.—The memberships of the following have been transferred: Mark C. Losch, Chas. W. Baum, E. S. Holtslander, Est. Thomas M. Hunter, Frederick H. Rawson, Est. Jas. D. Clark, Henry B. Clarke, K. Marks, Harry A. Zweig, Chas. R. Esson, George A. Chapman, Wm. Benkert, Edw. L. Adams, Est. John F. Clark, L. W. McMaster, John M. Shaw. The following were elected to membership on the Board of Trade: Wm. F. Fisher, Ernest Reiner, Walter C. Hicks, John W. Farley, Jr., Harry A. Wheeler, Henry J. Patten, Arthur C. S. Sanday, Henry J. Thayer, Thomas P. Tierney, Ernest C. Brunke, Franz A. Stude, George B. O'Connell, Otto Antonsen, John F. Clark, Jr., William C. Eaton, William R. Sinclair. Reported by Secretary James J. Fones.

Duluth.—R. C. Schiller has withdrawn from membership on the Board of Trade. Reported by Secretary Chas. F. MacDonald.

Kansas City.—C. L. Fontaine, Jr., Fred C. Davis, G. A. Johnson, Fred H. Udell have been elected to membership on the Board of Trade. The memberships of Frank O. Everts, Arthur Freeman, David Heenan and Joseph Whyte have been transferred. Reported by Secretary W. R. Scott.

Milwaukee.—The following new members have been elected to the Chamber of Commerce: Joseph R. Schaber, and R. W. Little. The memberships of the following were transferred: Anthony J. Hinton and Elias Rindskoff, deceased.

St. Louis.—Applications from the following are pending for membership on the Merchants Exchange: E. L. Stancliff on transfer of certificate of J. J. P. Langton and Richard F. Kleimeier, on transfer of certificate of Henry McRee. Reported by Secretary Eugene Smith.

TERMINAL NOTES

F. H. Hall & Co. have succeeded McArty & Hall, one of the long established grain firms of Des Moines, Iowa.

John C. Husted of C. A. King & Co., Toledo, Ohio, was a visitor on the Chicago Board of Trade market March 11.

J. F. Mead, formerly connected with the Merriam Commission Company of Omaha, Neb., has re-engaged with this house.

J. H. Klosterman & Co., grain merchants of Portland, Ore., are contemplating the establishment of an office in Los Angeles, Calif.

The Eastern Grain Mill & Elevator Corporation of Buffalo, N. Y., recently increased its capital stock from \$5,000,000 to \$6,000,000.

Albert M. Adams has become associated with Jackson Bros. of Chicago, and has been admitted to membership in the Chicago Board of Trade.

Gunnard S. Johnson of the Armour Grain Company of Kansas City, Mo., was recently elected to membership on the Kansas City Board of Trade.

C. L. Fontaine, president of the General Commission Company of Kansas City, Mo., was recently elected a member of the Kansas City Board of Trade.

Felix Dreyer of the Dreyer Commission Company of St. Louis, Mo., was joined in marriage recently with Miss Frimuth Mathes. Mr. Dreyer is very popular among grain and feed circles of St. Louis and received the congratulations of very many friends.

At the annual election of officers held early in March on the Detroit Board of Trade, Detroit, Mich., Gerald Hulett, manager of F. J. Simmons & Co., was elected president of the Board for the coming year. William G. Lichtenberg was chosen first vice-president and Armin Rickel, second vice-

president. The new directors are Frank T. Caughey, C. R. Huston, Theo. W. Swift, F. W. Blinn, H. B. Simmons, A. S. Dumont, Robt. Henkel, Ernest Stott.

W. C. Schilthius of the Continental Grain Company of New York City recently made application for membership in the Baltimore Chamber of Commerce.

The Richardson Feed & Grain Company of Milwaukee, Wis., has been incorporated with a capital stock of \$10,000 by C. A. Richardson, J. Ely and J. J. Ryan.

C. Oscar Lamy, president of the J. H. Teasdale Commission Company of St. Louis, Mo., sailed from New York with his wife recently on a four weeks' trip to Panama.

The Trans-Mississippi Grain Company of Omaha, Neb., has leased and will operate the terminal elevator at Omaha, formerly operated by the Merriam & Millard Company.

Charles England, an ex-president of the Baltimore Chamber of Commerce, Baltimore, Md., was recently re-elected chairman of the Arbitration Committee of the Chamber.

Joseph R. Schaber, representative at Milwaukee, Wis., of Bartlett Frazier Company of Minneapolis, Minn., was recently elected a member of the Milwaukee Chamber of Commerce.

The Seattle Chamber of Commerce, Seattle, Wash., has made plans to erect its own building in which quarters will be provided to accommodate the Merchants Exchange.

Charles W. Lonsdale, president of the Simonds-Shields-Lonsdale Grain Company of Kansas City, Mo., returned with his family on March 1 from an extended trip to Italy and France.

George S. Jackson, president of the Barnes-Jackson Company, grain exporters of Baltimore, Md., sailed early in March on a two months trip to Europe and other foreign countries.

Leroy D. Godfrey, well known in the grain trade of Minneapolis, Minn., is now located at Winnipeg, Man., where he represents the export grain firm of Parker & Graff of New York City.

Edward Lambert, for sometime past connected with the grain export firm of C. B. Fox Company of New Orleans, La., has become connected with the Chicago & Eastern Illinois Railroad at New Orleans.

Cross, Roy, Eberhart & Harris will succeed Cross, Roy & Saunders of Chicago, Ill., on March 17. A. L. Eberhart at that time will become vice-president and sales manager. S. C. Harris will have charge of the grain department.

Southworth & Co. of Toledo, Ohio, announce in their Weekly Market Review of March 8 that Toledo closing cash grain and seed prices are now being broadcasted daily at 3:30 p. m. from Station WWJ, Detroit News, Detroit, Mich.

John F. Cramp, Jr., has left the Newsome Feed & Grain Company of Pittsburgh, Pa., and engaged in the grain, feed, flour and hay brokerage business at Philadelphia, Pa., on his own account. Offices are in the Bourse Building.

The grain and milling interests of Toledo, Ohio, now have the benefit of a branch office located at Toledo of the National Bureau of Foreign and Domestic Commerce. It is in charge of L. J. Evans of the Toledo Chamber of Commerce.

H. Lee Early of the Early & Daniel Company of Cincinnati, Ohio, received a very hearty reception recently when for the first time he appeared on the floor of the Exchange after his long and serious illness from which he has fully recovered.

James B. Mitchell of the Morrison Grain Company of Kansas City, Mo., has purchased the Board of Trade membership of L. W. Sanford, formerly of the Federal Grain Company. The price was given as \$5,500, including the transfer fee of \$500.

A late report by the Insolvency Committee of the Kansas City Board of Trade on the recent failure of the Western Grain Company of that market showed liabilities of \$45,000 and assets of \$15,000,

which included a membership in the Board of Trade held by C. M. Woodward, president of the company. The company had a capital stock of \$50,000, of which \$31,500 was issued. B. C. Moore is receiver for the company.

Samuel Plant, president of the St. Louis Merchants Exchange, and Bert Lang have been named as delegates of the Exchange to the twelfth annual convention of the Chamber of Commerce of the United States to be held at Cleveland, Ohio, May 6, 8, 1924.

The La Budde Feed & Grain Company of Milwaukee, Wis., recently mailed its friends in the grain and feed trade a very useful chart which gives the comparative range in prices for the past three years of bran, standard middlings, oil meal corn and oats.

The Nelson Grain & Milling Company of Kansas City, Mo., has been reorganized with Wyan Nelson, S. T. Wildbahn, E. L. Barr and R. N. Barnard as stockholders and officers. The company is engaged in the general feed and cornmeal manufacturing business.

Howard F. Braser of W. P. Braser & Sons, grain and feed merchants of Philadelphia, Pa., was recently elected a director of the Philadelphia Commercial Exchange, Philadelphia, to fill the vacancy caused by the election of Hubert J. Horan as president of the Exchange.

The Kansas City Grain Club held its annual meeting early in March and elected the following officers: B. C. Christopher, Jr., president; H. C. Gamage, vice-president; W. W. Fuller, secretary and

treasurer. The Executive Committee is composed of W. S. Noland, S. H. Miller, J. J. Kraetli, F. H. Theis and Roy Swenson.

The Quaker Oats Company of Chicago, Ill., declared a special cash dividend late in February, of 16½ per cent on the common stock to pay all dividends in arrears for 1921, 1922 and the early part of 1923. Announcement was also made that the 12 per cent annual rate on the common stock would be continued in the future.

The largest tow in the history of the Federal barge line service on the Mississippi River left Cairo, Ill., early in March for New Orleans. The cargo included 10,200 tons of grain for export. The larger part of the grain was shipped from St. Louis by rail to Cairo during the winter, navigation above Cairo being closed on account of the ice.

Henry Hirsch, one of the oldest active members of the Toledo Produce Exchange, Toledo, Ohio, celebrated his seventy-first birthday recently and in commemoration of the event his friends "on 'change'" presented him with a bouquet of American Beauty Roses. The presentation speech was made by president of the Exchange, J. O. Hurlbut on the floor of the Exchange.

According to announcement made by E. A. Perry, United States Referee in bankruptcy for the Southern district of Illinois, the creditors of the E. B. Conover Grain Company of Peoria and Springfield, Ill., will receive about 17 cents on the dollar. At the time the late E. B. Conover failed about two years ago liabilities were given at \$325,000 and assets at \$174,000.

TRADE NOTES

R. H. Barker of The Wolf Company of Chambersburg, Pa., has changed his address to the home office and is now at Hotel McKinley, Chambersburg.

The Huntley Manufacturing Company of Silver Creek, N. Y., manufacturers of the well known line of Monitor grain cleaning machines and other grain elevator and flour mill machinery, at its recent annual meeting elected W. H. Buchholtz, president and treasurer; A. B. Chapman, secretary, and W. A. Chapman, vice-president.

The Weller Manufacturing Company of Chicago, Ill., is building an addition to its plant at 1820-1856 North Kostner avenue which will take care of storage of materials, thus releasing a large amount of space which will be used for manufacturing their elevating, conveying and power transmission lines. New and up-to-date equipment will be ordered to take care of the increased business that has been coming in the past few months.

A new "Bauer" Attrition Mill has been placed on the market by the Bauer Bros. Company of Springfield, Ohio, which has many very new and desirable features and which has received the whole-hearted approval of grain dealers and millers after hard tests in actual service. First machine of the new type was installed in the William Hayden Milling Company's mill at Tecumseh, Mich., and another one of the same design was shipped in January, 1922, to the Baltimore Seed & Feed Company of Baltimore, Md. Others are now in operation in the United States and shipments have been made abroad. Every one of these users has written most enthusiastically about the superior service rendered and the manufacturers feel quite secure in their statement in their advertising that "Bauer" Originates and Shows How."

"The man diligent in business shall stand before kings" was asserted by the Master somewhere around the year A. D. 31. A conspicuous example of the saying appears in the story of Peter Lindstrom, a blacksmith who has served for 48 years with the Barnard & Leas Manufacturing Company of Moline, Ill. He is now 83 years of age and

punches the clock regularly at 6:57 each morning. Mr. Lindstrom was an honored guest at a meeting of the Tri-City Manufacturers Association held at Rock Island, Ill., January 23, 1924, and was the oldest in point of service. Honorable W. A. Rosenfield, himself a manufacturer, Mayor of Rock Island, presided as toastmaster. Perhaps Barnard & Leas Manufacturing Company affords conditions in their plant for the promotion of longevity. Anyway Mr. Lindstrom gives no other formula for his good health and retention of his job except temperance, regularity and the mind on the job. Wets and slackers please notice.

There is said to exist an opinion that Minneapolis is going out of the grain elevator field. This is contradicted by the letting of a contract to Fegles Construction Company of Minneapolis for a 450,000-bushel elevator by Spencer Kellogg & Sons, Inc., of Buffalo, N. Y., in connection with their linseed oil mills in southeast Minneapolis. This new improvement will enable Spencer Kellogg & Sons to receive, clean, and store their own flax. Plans are now being developed in the engineering offices of Fegles Construction Company, and work of building will be started immediately, plant to be completed in time for this year's crop. The working house, which will receive and clean the seed, will be approximately 175 feet high, and the storage tanks 80 feet high. The structures will be entirely fireproof and mechanical equipment will be up-to-date in every particular. In the cleaning of flax, the designers had in mind the changed condition of late years of this crop, and have developed a new and much advanced method of cleaning the flax preparatory to crushing.

ACCORDING to the latest figures of the Russian Central Statistical Committee, the area under winter grain in the Ukraine is now returned at roundly 16,000,000 acres, being 6 per cent, smaller than a year ago. The total acreage for the whole of Russia and the Ukraine now amounts to 63,800,000, compared with 62,800,000 a year ago. The condition of the crops throughout most parts of the country is average, and in some governments above acreage.

W. R. LEATHERS HEADS IMPORTANT BRANCH

Sprout, Waldron & Co., the well-known mill building firm of Muncy, Pa., have always specialized on service to patrons at the home office and arrangements have just been completed to extend this service to the Chicago branch, recently placed under the management of W. R. Leathers. Enlarged quarters have been secured at No. 9 South Clinton street and a complete engineering and service department will be maintained there which will be unrestrictedly devoted to the interests of western clients. In fact it will be the aim to serve western territory with the same skilled attention and equal promptness as that given the eastern trade from the Muncy office. The territory served will include Illinois, Wisconsin, Iowa, Nebraska, Minnesota, North and South Dakota, Colorado and thence west to the Pacific Coast.

W. R. Leathers, the new manager of the office, comes direct from the home plant at Muncy where he has been for a number of years in charge of sales and engineering. He was born at Westminster, S. C., December 13, 1876 and attended the public schools there until 14 years of age when



W. R. LEATHERS
Photo by Matzene, Chicago.

he removed to Louisville, Ky., where he finished an academic and manual training course in a local college. At the age of 18 he engaged as superintendent with the Pleasant Valley Roller Mills of Pleasant Valley, Ky., and after one year at that point went in similar capacity with the Kelley Milling Company at Kansas City, Mo. Five years later he went with the sales department of Sprout, Waldron & Co., of Muncy, Pa., establishing his headquarters at Nashville, Tenn. Until 1917 he covered all the Southern States for the firm when he removed to the home plant where he took charge of sales and engineering, remaining there until his removal to Chicago on February 1.

Mr. Leathers bring a ripe experience, unlimited energy and thorough acquaintance with the engineering problems of the miller to the disposal of the great western milling field. We publish his portrait in connection with our article and he begs us to state to all members of the milling and allied trades when visiting in Chicago, that he will be glad to meet them face to face.

THE Russian grain export campaign for 1923-24 is now sufficiently advanced to give some definite idea of her exportable surplus. Up to January 1 over 1½ million long tons of grain were contracted and partly delivered. This was equal to about 13 per cent of her pre-war shipments for the crop year. Of the amount contracted so far Germany has taken approximately 471,000 long tons; Holland, 285,000 long tons; and France, 180,000 long tons. Russian shipments of rye from the last harvest

have been slightly more than pre-war, but wheat shipments amounted to only about 9 per cent of pre-war.

GERMANY REGAINING PRE-WAR CROP PRODUCTION

The "come-back" of Germany as an agricultural producer is shown in figures just released by the United States Department of Agriculture based on radio dispatches from its agricultural commissioner at Berlin. The 1923 wheat crop in Germany is placed at 103,267,000 bushels compared with 69,725,000 bushels in 1922.

Rye production last year was 263,045,000 bushels compared with 209,519,000 bushels in 1922; barley 108,446,000 bushels compared with 73,013,000 bushels; oats 420,719,000 bushels compared with 284,567,000 bushels; potatoes 1,197,119,000 bushels compared with 1,494,181,000 bushels, and sugar beets 9,585,000 short tons compared with 11,896,000 short tons the preceding year.

Germany imported 21,000 tons of wheat and 34,000 tons of rye during the month of November, as well as 1,300 tons of rye flour and 15,000 tons of wheat flour, according to cable reports to the Department of Commerce. Diminished imports of wheat were expected for December, as a result of the improved domestic deliveries and also to the increased rye imports owing to the Russian contract deliveries, and sustained demand therefor.

PROSPECTS FOR 1924 IN RUSSIA

The Soviet Government for the present is very much interested in supplying the population with the spring seeds so as to bring the acreage under spring grain crops up to that of 1916.

There is a great lack of spring seeds, especially oats, in the northern part of Russia, where the crop of 1923 was not large and a part of which could not be harvested on account of the rains. The problem of the Government is not only to increase the area of land under the spring grain crops, but to try to replace millet by more valuable spring seeds and of higher quality.

In some parts of Russia (Jartar Republic) the millet fields now cover 30 per cent of all spring grain crops under cultivation, instead of 10 per cent as was customary prior to the war.

The fields of winter crops planted in the fall of 1923 suffered in the northern part (Government Pskow) of Russia on account of the large amount of rains and a part perished from limax (slug).

In the northwestern and western parts of European Russia (Upper Volga region and government of Penza) the fields of winter crops are overgrown on account of unusually warm weather during the last part of October.

In the central part the winter rye and wheat are normal and generally good.

Source: Economic Life.

PROGRESS ON THE ST. LAWRENCE PROJECT

The New York Chamber of Commerce recently invited James P. Goodrich, of Indiana, to make an address on the St. Lawrence waterway. Mr. Goodrich gave the New Yorkers an earful and when he had finished Irving T. Bush, president of the Chamber, said that, although he had all his fortune invested in waterfront terminals in New York, he did not fear the competition of the St. Lawrence waterway.

Opposition from New York and New England is growing less, and in the meantime the Canadian Government is evincing more interest, and steps are being made to appoint a new and enlarged commission of experts to make a final report covering "the engineering features of the whole project, including its cost."

The communication from the Canadian Government is being given careful consideration by several executive departments, including those of Commerce and Interior, and as soon as they have concluded their individual studies reports will be made to the State Department for use by it in answer-

ing the communication. It is indicated in some official quarters, however, that this Government had hoped Canada might have found it possible to agree to the suggestion of Secretary Hughes for the negotiation of a treaty covering the project without a "desire to give further consideration" to that point.

The report of the International Joint Commission recommended in part that the expert commission to be created should consider "whether construction of locks and dams in the river (St. Lawrence), or by side canals with the necessary locks, or by combination of the two," would provide the most beneficial use of the waters of the St. Lawrence. Methods of control for the waterway, effect upon lake levels and drainage from adjacent rivers and other questions, including power development, were set apart for consideration of the experts.

NEVER GIVE GENERAL RELEASES ON RAILROAD CLAIMS

BY OWEN L. COON

Grain shippers should refuse to give any railroad a general release of claims on "all cars shipped prior to _____" (a certain date being inserted by the representative of the railroad). Certain shippers are doing so at the present time, apparently with the mistaken idea that by so doing they are receiving a more liberal settlement on claims filed without any injury to themselves.

Not one grain shipper in two hundred files claims on all cars where he has money justly due; in fact, out of more than 500 country grain shippers who requested a certain traffic firm to audit their account sales for all possible claims during the past year (after the shippers had picked out all the claims they could find themselves) only two were found to have filed practically all the railroad claims to which they were entitled. The finding of every possible claim that can arise in connection with a shipment has become so specialized a task that no one short of a claim and traffic expert is certain to find them all. The carriers have come to a full realization of this fact.

When a shipper after filing some claims direct with the railroad company, through an attorney or a commission house, receives a visit from a railroad representative who offers an exceedingly attractive settlement, and only asks in return the signature of the shipper to a document of a few lines, releasing the railroad in general terms from all claims on all cars shipped prior to a certain date, one thing is certain,—the shipper has other legitimate claims on his books that have not yet been filed, and the carrier desires to secure release of the same by the settlement of claims then pending.

If the proposition of the railroad is accepted, the shipper does not know to what extent he is being injured. The railroad has knowledge as to the probable amount of the unfilled claims being released, while the shipper is in entire ignorance. The carrier, on the other hand, can hardly be expected to request the shipper to file a claim. The filing of the claim is strictly the affair of the shipper.

In situations such as the above, the shipper should agree to settle the pending claims already filed on their respective merits, but reject any and all propositions involving the signing of a general release. As soon as possible thereafter the shipper should have his account sales audited by some claim or traffic expert to see what claims are unfilled, which in all fairness should be filed and pushed to a satisfactory conclusion. Remember that not one shipper in two hundred is sufficiently acquainted with claim work to find all of his claims. The chances are that you are one of the hundred and ninety-nine. It would seem best to play safe and in all instances refuse to give general release of claims on all cars shipped prior to a certain date.

IT is reported that the Morosoff Elevator at Rostov-on-Don, one of the largest in Russia, has been reconstructed and will be used for the grain export trade.

**HIGHER COPPER PRICES EXPECTED**

Copper prices are expected to advance further in view of the record February shipments of the metal of 234,000,000 pounds, an increase of 14,000,000 pounds over January. Production was 205,000,000 pounds, a decrease of 25,000,000 pounds. Surplus stocks March 1 totaled 291,000,000 pounds, a reduction of 29,000,000 pounds during the month.

ROCK ISLAND PLANS EXPENDITURES

Executive officials of the Rock Island Railroad have announced that the company will expend \$6,500,000 on improvements during the year. On track replacements \$1,850,000 will be spent; \$1,400,000 on bridges, trestles, culverts, etc., and \$400,000 on ballasting. Expenditures for additional main track are placed at \$425,000, and \$350,000 will be expended on the Burnside track elevation work in Chicago.

AMERICAN WOOLEN EARNINGS

The annual balance sheet and statement of the American Woolen Company for the past year shows net earnings equivalent to \$8.84 a share on the common stock after interest, taxes, special reserve, and preferred dividends. In 1922 the corresponding earnings were \$8.63 per share, but in 1923 the earnings were charged with a special reserve of \$5,500,000, without which net earnings would have approximated \$18.85 a share on the common stock.

ANNUAL REPORT OF PNEUMATIC TOOL

An increase of \$306,219 in net income for 1923 is shown in the report of the Chicago Pneumatic Tool Company, as issued March 10. After all charges, \$812,037 remained last year, as compared with \$505,818 in 1922. This was equivalent to \$7.13 a share on stock in 1923, as compared with \$4.44 a share the previous year. The total net income, above interest and charges showed \$883,115 for 1923 against \$600,096 in 1922. Interest and charges in 1923 were \$71,078, against \$103,278 in 1922.

CONTINENTAL MOTORS CONSIDERS BOND ISSUE

The Continental Motors Corporation, it was announced on March 13, contemplates authorizing \$10,000,000 fifteen year sinking fund 6½ per cent bonds, which, if authorized by the stockholders, will not increase the indebtedness of the corporation, but will change current liabilities into long time deferred obligations. It is proposed to sell at this time \$7,500,000 of the issue, which will be sufficient to pay off \$3,750,000 notes due in a year and practically all the company's indebtedness to banks.

RUMORS ON RAIL MERGER

The report comes out of St. Paul that the Interstate Commerce Commission will give its decision on the application of Great Northern, Northern Pacific and Burlington to consolidate before the end of the year and that it will be favorable. Nothing is available here to indicate that the problem of placing the St. Paul in the general consolidation plans has been solved, but it is asserted that the Northern-Burlington group has begun preliminary work on a new organization through which the three roads could be consolidated.

Dissolution of the Northern Securities Company, created in 1901 by James J. Hill to hold control of three roads is being considered by the stockholders who are principally Hill heirs. It has been found that this corporation is not suitable for the proposed consolidation of the three roads and that a saving of \$75,000 a year in taxes, salaries and other

expenses could be made by dissolving it. Its principal assets are 23,063 shares of Burlington, 27,552 shares of Crow's Nest Pass Coal Company, Ltd., and \$150,000 United States certificates of indebtedness.

STANDARD OIL OF INDIANA HAS GOOD YEAR

The Standard Oil Company of Indiana reports net earnings for 1923 of \$41,538,499 after all charges and Federal taxes or the equivalent of \$4.68 a share on \$221,706,668 capital stock, par value \$25. This showing is exceptionally favorable in view of conditions prevailing in the oil industry during 1923. Total net is only moderately less than the figure reported for 1922 which was one of the best years ever experienced by the industry. In that year Standard of Indiana's net equalled \$5.60 a share on \$220,181,638 capital stock.

CORN PRODUCTS ANNUAL REPORT

For the year 1923 the Corn Products Refining Company reports net earnings of \$10,471,559 after interest, taxes and depreciation. This equals \$17.54 a share on the common stock compared with \$17.43 a share in 1922. During the year just closed the company wrote off the last of its intangible items, debiting surplus with \$16,000,000 for this purpose. In the previous year \$20,000,000 was written off. The balance sheet now makes no provision for patents, trade marks and good will. The operating profit for the year is \$13,978,966, slightly higher than in 1922, with a surplus for the year's operation, after all charges and dividends of \$4,253,109, also slightly larger than the 1922 figure.

JANUARY RAIL EARNINGS

Class 1 railroads earned during January net operating income of \$51,281,200, equivalent to an annual rate of 4.54 per cent on the tentative valuation of the carriers. In the eastern district the rate of return was 5.04 per cent, in the Southern 5.68 per cent and in the Western 3.59 per cent. The same roads in January last year earned a net operating income of \$61,128,970, which was at the annual rate of return of 5.58 per cent. In December, 1923, the net operating income was \$69,694,744, or 4.44 per cent. Forty-four railroads operated at a loss in January, of which 20 were in the eastern, two in the southern and 22 in the western district. In December 47 railroads had operating deficits.

ARMOUR COMEBACK IN 1923

The annual report of Armour & Company for 1923 reveals an improved financial position and a marked recovery in earning power. President White states that the business formerly transacted by Morris & Company has been retained by the Armour organization and that the total volume for 1923 was in excess of that formerly done by both companies. Sales of the combined properties were \$800,000,000 on which the net profit was approximately 1½ cents per dollar of sales. Costs of operation have been reduced and losses held at a minimum; write-offs for the year aggregated only \$1,919,231. The company's South American properties experienced a reasonably good year and despite continuance of disturbed conditions in Europe the export business as a whole was remarkably good.

Since June 30, 1923, a reduction of \$53,000,000 has been effected in notes payable and in the opinion of the management the wisdom of the new financing arranged about a year ago has been fully justified by the 1923 operating results. Current assets are now \$220,517,000 compared with current liabilities of

\$84,044,000, a ratio of 2.62 to 1. Earnings for 1923 applicable to interest and depreciation were \$38,583,217. After deducting \$7,971,703 depreciation and \$14,920,256 interest, the balance equalled 23.50 per cent on Armour of Delaware preferred stock, and 18.03 per cent on Armour of Illinois preferred. Surplus after preferred dividends equalled 5.40 per cent on the combined class "A" and class "B" common stocks.

UNFILLED STEEL ORDERS INCREASE

Unfilled orders of the United States Steel Corporation February 29 amounted to 4,912,901 tons, an increase of 114,472 over 4,798,429 tons at the end of January and of 467,562 over 4,445,339 at the end of December, but a decline of 2,371,088 from 7,283,989 tons at the end of February, 1922. Increased buying has been reported for the last month but, according to the showing of these figures, the volume exceeded shipments by a narrower margin than was supposed because of higher operating schedules.

The February monthly total was the highest since last September, when the books showed 5,035,750 tons, and was the third successive month to show an increase. The February pig iron output was the largest since August.

PACIFIC G. & E. PLANNING SALE OF STOCK

The Pacific Gas & Electric Company, it is understood on advices from New York, is planning to offer \$10,000,000 in stock in near future. This may be followed by numerous other issues of stock by public utility corporations. It is said that Wall Street bankers are advising public utility companies to finance through the sale of stock rather than bonds in order to provide a greater equity for the bonds and thereby strengthen their capital.

It is reported that the Pacific Gas & Electric offering will be of common stock. The company at present has outstanding in the hands of the public, not including subsidiary holdings, \$35,630,868 common stock. The dividend on this issue was increased from \$6 to \$8 annually in December.

WILLYS-OVERLAND EARNINGS

Willys-Overland in 1923 showed net income after interest, taxes and depreciation was \$13,034,032 or the equivalent, after allowing for one year's dividend at 7 per cent on the preferred stock, to \$5.32 a share on the common, par value \$5. This compares with 24 cents a share on the common in 1922. The balance sheet now shows a profit and loss surplus of \$13,002,417 compared with a deficit of \$43,231,299 at the close of 1922. The improvement is due to the excellent earnings for 1923 and to a reduction in the par value of the common stock from \$25 to \$5 which correspondingly reduced the capital liabilities. The company is now free of bank indebtedness but has outstanding \$10,000,000 6½ per cent first mortgage bonds which were sold to provide additional working capital. President Willys has announced that the February output this year averaged 1,000 cars daily.

AMERICAN STEEL FOUNDRIES SHOWS RECORD EARNINGS IN 1923

The balance sheet of the American Steel Foundries Company for 1923 shows net profits of \$7,595,944 after interest, taxes and other deductions. This is the best year the company ever experienced. Results equalled \$9.55 a share on the common stock, par value \$33 1/3, compared with \$4.23 a share in 1922. President Lamont states that there is a prospect of fairly good business in 1924 but that the large orders which carried the company so well through 1923 tapered off almost to the vanishing point in December and that the company was therefore confronted with the necessity of materially reducing operations. January operations of the Steel Foundries plants were on only about a 40 per cent basis but fortunately the plants of the company's principal subsidiary, the Griffin Wheel Company, was able to operate at fully 75 per cent of capacity. The company's surplus account for the year shows \$4,729,636, against only \$860,264 for 1922.

THE EXPORT TRADE IN GRAIN*

METHODS AND TERMS IN BUYING WHEAT
FOR EXPORT

The general character of American grain-exporting houses is indicated by the following remark by a former president of United States Grain Corporation:

Since exporters' contracts must necessarily cover deliveries of wheat for weeks, and sometimes for several months, in advance, and since the commodity price fluctuates widely under the influence of world developments in production and consumption, politics and finance, it is evident that a house to be successful and maintain the necessary prestige and credit for its contracts to be taken abroad with confidence must

make use of assembling facilities already provided than to set up their own. This they do by buying supplies from their owners. Such assembling as the true exporters undertake consists mainly in bringing together different lots purchased from primary market dealers. For this purpose they make use of public elevators at transfer points and at the seaboard.

Another reason for this practice is that export trade, as compared with domestic trade, is scattered and intermittent. The exporter must be in a position to take on supplies wherever wheat suitable for his orders can be had at the world market price, and to handle them by whatever route affords the

port trade largely by "fobbing" and are usually referred to as "fobbers."

The trading of exporters with one another in wheat on spot or in other positions comes about in various ways. One exporter, for instance, may urgently require spot wheat to meet a freight engagement, while another has wheat on hand for which he has no immediate use. Naturally, a trade between them follows. The arrival of purchases from interior dealers earlier than expected may give an exporter supplies that he is glad to sell and replace with later arrivals, in order to save carrying charges. An exporter with an order in hand may buy f. o. b. wheat from another who has not received so good an offer. The possession of a better ocean contract may place one firm in a position to buy from another that is less fortunate. Again, views on cash premiums relative to futures vary widely between different exporters, and the one who believes in sagging premiums may sell to another who believes in strong premiums. In other words, when an exporter wishes to buy or sell, he will trade with another exporter as freely as with anyone else. The practice facilitates the movement of our wheat overseas.

TERMS ON WHICH DOMESTIC PURCHASES
ARE MADE FOR EXPORT TRADE

Years ago a tentative form of contract was formulated called the "intermarket agreement." While this was never formally adopted by the grain dealers' associations, its provisions contain the terms, implied or expressed, on which wheat is usually purchased for export today. The principal difference is that present contracts do not often provide for the calling of margins. It is quoted here because it appears to be as good a general statement as any of present-day practice.

THE INTERMARKET AGREEMENT

Unless otherwise specified in writing the following provisions shall govern all cash transactions in grain between signers of this instrument from July 1, 1904, to and including July 1, 1905. Any signer may, however, withdraw upon giving ten days' notice in writing to the others, without affecting the obligation of agreement as to the rest.

Section 1. The terms used for time of shipment in this form shall read "On or before (date)." Grain loaded before date of sale shall not be applied on such sale without the buyer's consent.

In case the seller, through unavoidable delay, fails to make shipment within contract time, but performs shipment within a reasonable time thereafter (not

have a considerable amount of resources and a high reputation. That is a fact in respect to most of the existing firms. For no firm with a reputation of trickery or repudiation of contracts, or with such limited resources that market fluctuations may force it into insolvency before its contracts mature, can successfully enter into contracts with importers abroad.

The prominent exporting houses, with the exception of a few firms operating on the Pacific Coast, are affiliated with the North American Grain Exporters Association. The headquarters of the association are maintained at the New York Produce Exchange.

The objects of this association, as set forth in the by-laws, are to foster trade and commerce and the interests of those having a common trade, business, or financial interest, to reform abuses relative thereto, to secure freedom from unjust or unlawful exactions, to diffuse accurate and reliable information as to the standing of merchants and other matters, to procure uniformity and certainty in the customs and usages of trade and commerce, to promote a more enlarged and friendly intercourse between business men, and to do such other and further acts and things relating thereto as may be found necessary or convenient so far as the same are permitted by the laws of the State of New York to corporations organized under this act, and particularly to facilitate the orderly distribution for export of North American grain and to foster the export grain business and the interests of those engaged therein.

HOW DIFFERENT CLASSES OF EXPORTERS
BUY WHEAT

The foreign firms that have branch houses in New York, and the American seaboard exporters, rarely go back of the primary markets for supplies but depend upon securing them from the receiving class of grain dealers in these markets.

They do not attempt to assemble supplies direct from country stations for it would be impracticable to do so without duplicating the equipment and country-buying organizations of the terminal and line elevator companies. If this were done, exporters would be forced to go into domestic business, because foreign business alone would not cover the overhead. Attempts to combine the two lines of work have rarely been successful. Either branch of the trade appears to be enough for any one house to undertake on a large scale. It has been found more satisfactory and economical for exporters to

cheapest combination of inland and ocean rates. He must keep his capital liquid, and can not afford to be tied up to a certain territory by permanent investments.

The primary markets, however, are not the only source from which seaboard exporters obtain supplies for they frequently buy, and sometimes borrow, from one another. Spot stocks at seaboard are also drawn upon to meet their requirements.

While seaboard houses specializing in export trade rarely attempt to handle domestic business, there are a number of firms in the primary markets, which, although engaged principally in domestic trade, do carry on quite an export business at times. Through their location and the control of elevators they are in a position to obtain wheat direct from the country and handle it to advantage. Conse-

quently, they make a practice of assembling their own supplies. Firms of this class are found at Chicago, Duluth, Kansas City, St. Louis, Omaha, and some of the smaller interior markets. Their foreign sales are usually made through New York offices. Their principal contact with foreign trade, however, is through selling to exporters f. o. b. vessel at the seaboard.

The practice of the Galveston and New Orleans exporters differs somewhat from the methods of either the seaboard or the interior exporters. They buy largely from country dealers, but do not, as a rule, operate elevators or do much domestic business. They are favored as assemblers by the fact that there are no large concentration points for wheat between Kansas City or St. Louis and the Gulf. As is the case with the primary market exporting elevator concerns, they participate in ex-

ceeding three days), the buyer shall accept the grain so tendered, being privileged, however, to hold seller responsible for any actual loss which he may sustain by reason of the delay.

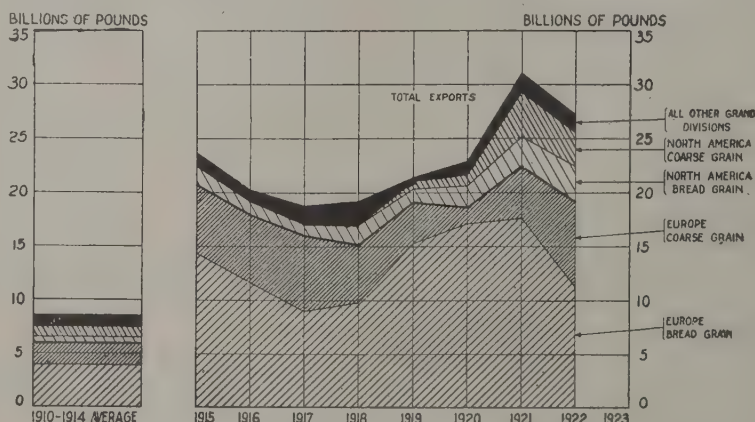
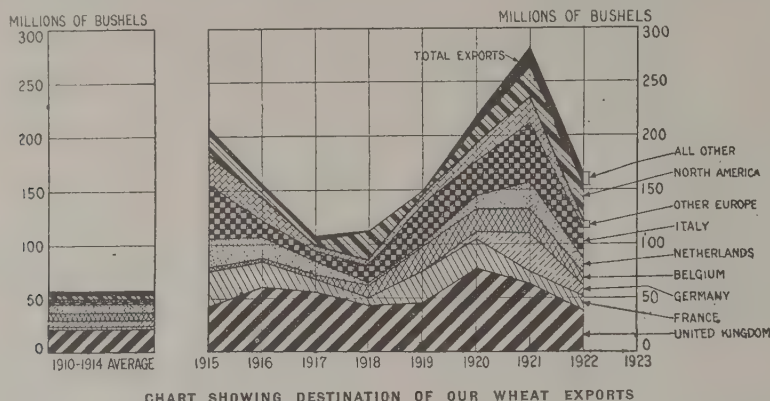
On trades under the term "opening shipment" or "shipment at opening" the seller shall be allowed (unless otherwise specified at time of trade) 10 days after the opening of navigation, as provided in section 18, in which to make shipment.

Sec. 2. On sales of 40,000 bushels or less a leeway of 2 per cent, and on all sales over 40,000 bushels a leeway of 5 per cent from contract quantity may be shipped, the excess or deficiency to be settled for at the market price when the actual quantity is determined and the buyer is notified.

Sec. 3. The seller may not ship less than 25,000 bushels on any one boat without buyer's consent, except on payment of any extra expense buyer may incur.

Sec. 4. It is understood, unless otherwise agreed upon, that all Lake shipments shall be by steamer or by barge towed by steam.

Sec. 5. Buyer shall furnish the seller with name



*The results of a survey by the Department of Commerce on the methods and possibilities of shipping grain abroad. Continued from page 539, February, AMERICAN GRAIN TRADE.

of consignee and give billing instructions on or before the day vessel is ready to load. If seller shall not request such instructions by 2 o'clock p. m., Central Time, buyer shall not be required to furnish same until 10 o'clock a. m., Central Time, of the day following.

Sec. 6. On all grain sold subject to the approval of the official sampler of the Chicago Board of Trade, an appeal may be made from the decision of said official sampler to the grain committee of the Chicago Board of Trade, as provided in rule 22 of the Rules of the Board of Trade of the City of Chicago.

In cases where grain is sold subject to the approval of a buyer's agent other than the official sampler of the Chicago Board of Trade, an appeal may be made to an arbitration committee consisting of the five Chicago arbitrators, as provided for in section 16.

Sec. 7. On Lake shipments seller shall notify buyer of date of shipment by 11 o'clock, Central Time, of the second day following date of shipment, or, in case of a shipment substituted under section 11 the second day following expiration of contract. Failure thus to notify shall not invalidate the contract, but the buyer shall be reimbursed for any loss occasioned thereby.

Sec. 8. On Lake shipments, seller must insure for buyer's account free of charge to 2 per cent above invoice amount. If market at the time of shipment shall be higher than the invoice value, seller shall then effect additional insurance to the market value of the port shipment, plus 2 per cent, but may charge the expense of such additional insurance to the buyer. Seller must furnish certificate covering the "eighteen days after arrival" clause, the expense of insurance after seventy-two hours to be borne by the buyer.

Sec. 9. It is specifically understood that bills of lading bearing the "strike" clause shall be suitable and proper tenders on Lake contracts made under this agreement.

Sec. 10. Broker's liability to cease on production of satisfactory principal.

Sec. 11. Seller shall have the privilege of substituting any shipment other than his own, providing such shipment has not arrived at port of destination and conforms to the terms of the contract and buyer is notified as provided for in the rules governing "notification of shipment."

Sec. 12. On Lake shipments, sales to be "buyer's option of consignee at Buffalo," unless otherwise agreed upon at the time contract is made.

Sec. 13. Payment by seller's draft on demand with documents attached, as customary.

Sec. 14. Margins to the market may be called by either buyer or seller. Such margins shall be deposited either in New York or Chicago, in accordance with the rules of the market where deposit is made.

Sec. 15. On trades made under which futures are to be given in exchange, buyer shall be allowed such time as is allowed by the rules of the exchange where such future is to be respectively given and taken, to close out such future free of commission.

Sec. 16. There is hereby appointed a board of arbitrators to consist of five resident members of the Chicago Board of Trade; and another board of arbitrators to consist of five resident members of the New York Produce Exchange, which shall be known as the Chicago and New York Boards of Arbitration, respectively.

Chicago Board of Arbitration: Walter Fitch, E. L. Glaser, S. T. Graff, J. M. Jenks and G. S. McReynolds. New York Board of Arbitration: H. B. Day, W. H. Kemp, John Marshall, Yale Kneeland and E. Pfarrius.

In case of permanent vacancies occurring in either of these boards of arbitration, such vacancies may be filled by selections agreed upon by all of the remaining arbitrators on such board, this selection in each case to be made from the resident members of the exchange the board of arbitration of which has experienced such vacancy. A majority of either board shall constitute a quorum, but either board shall fill temporary vacancies if requested by either party to an arbitration coming up before it.

The respective boards of arbitration above provided for are authorized at any time to select from their members chairman and secretaries, either permanent or temporary, to facilitate the transaction of any business.

In case of any dispute arising over the fulfillment of the terms of any contract made under this agreement, in which the claim is made by the seller against the buyer, the case shall be arbitrated by the New York Board of Arbitration.

In case of any dispute arising in which the claim is made by the buyer against the seller, the case shall be arbitrated by the Chicago Board of Arbitration.

Excepting that in disputes arising over the failures of the shipper to ship in contract time, and in disputes arising over grain that had left point of shipment before time of sale, and is not sold "Point of shipment approval," the arbitrators shall always be the New York Board of Arbitration.

And in case of disputes arising on account of sales made subject to the approval of buyer's agent, other than the official sampler of the Chicago Board of Trade, the arbitrators shall be the Chicago Board of Arbitration, as provided for in section 6.

In cases where claims are made by both buyer and seller, they shall submit their respective cases to both boards of arbitration, a majority of which shall determine where the case shall be tried; should this

fail of a majority vote, the president of the New York Produce Exchange shall decide.

The respective board of arbitration shall be governed in decision by the rules of the exchange under the inspection of which the contract is made; and the claimant in any dispute must show that the damage claimed has been actually sustained.

In arbitrations for settlement of disputes over contracts made under this agreement (excepting arbitrations relating to buyer's agent, as provided for in section 6) a fee of \$25 shall be paid for each sitting, by the party against whom the decision shall be rendered, excepting as the committee may otherwise order.

Fees for appeal to the grain committee from the decision of the official sampler of the Chicago Board of Trade shall be as specified in rule 22 of the Rules of the Board of Trade of the City of Chicago.

Fees for appeal from decision of a buyer's agent, other than the official sampler of the Chicago Board of Trade, shall be the same as similar fees charged by the grain committee, namely, \$5 per car, \$10 per canal boat, and \$50 per vessel; such fees always payable by the party against whom decision is rendered, within one business day after such decision is made; and such party shall be also subject to all additional expense incurred by the arbitrators in securing samples and conducting case. Should the grain committee change their charges for deciding appeals, a similar change shall be made in the above schedule.

Sec. 17. Contracts for shipment by all rail or lake and rail, c. i. f. eastern points, shall be subject to these rules as regards adjustments of variations in quantity, broker's liability, drafts, margins, futures, times of shipment, official samplers and arbitration.

Sec. 18. Navigation shall be understood to be open from Lake Erie ports when vessels can get into Buffalo Harbor; from other lake ports, after arrival of vessels from Buffalo at such ports, intermediate watercourses continuing open.

New York exporting houses usually stipulate that purchases are made in accordance with the rules and regulations of the New York Produce Exchange.

GENERAL HAZARDS OF GRAIN ELEVATOR OPERATION

BY GODFREY MORGAN*

Many years ago, I heard a long discussion at a meeting of Street Railway Managers on the subject of accidents and the outstanding statement made during that discussion was that "if the personal element were eliminated, 90 per cent of the street railway accidents would be avoided."

This statement was based upon investigation of all accidents reported by street railways for over a year, and it seems to me that the statement will hold true today, not only in regard to street railway accidents, but to accidents of all kinds. In other words, I believe that probably 90 per cent of the accidents resulting in personal injury can be attributed to some individual's carelessness, thoughtlessness, maliciousness or neglect.

I am not going to attempt to advise how this accident or that accident might be avoided by mechanical appliances, but rather to emphasize the responsibility of each one of us to the other in reducing this personal element as a factor in personal injury accidents.

In the operation of grain elevators, there are of course, the ordinary hazards which apply to moving machinery and not only is it recommended by welfare experts that machinery should be guarded, but it is insisted by insurance companies and is in many states a legal requirement.

I believe it is safe to say that all rope and belt drives, gears, elevator wells and moving machinery in the Buffalo elevators are provided with guards to prevent any possibility of personal injury, but you who are foremen and operators know perfectly well that a bent guard or other protection giving trouble in the operation of the machinery will sometimes be removed temporarily and then forgotten until some inspector comes around and calls attention to it. Or far worse, somebody loses an arm, a leg or suffers some other injury due to personal thoughtlessness.

The point, therefore, is that whenever a guard must be removed, see that it is replaced immediately, if possible, and if not, see that the machinery

*Mr. Morgan, who is manager of the Kellogg Elevator at Buffalo, N. Y., delivered this paper before the January meeting of the Milling and Grain Elevator Section of the safety course which is being conducted under the auspices of the Safety Bureau of the Buffalo Chamber of Commerce.

is kept guarded until the appliance has been replaced. Let me emphasize this by calling your attention to this fact. On all railroads, placed at a suitable distance from tunnels, bridges, etc., you have seen ropes hung vertically from wires to warn brakemen on the top of cars of the danger. It may surprise some of you to know that in a spirit of thoughtless playfulness, the brakemen would pull at these ropes when passing under them, frequently pulling them down—thereby destroying an effective warning, and risking the lives of their fellow workmen. In order to stop this practice, it was necessary to pass a state law inflicting severe punishment for tampering with these safety devices.

Open bins, stairways, holes in floors (particularly temporary ones) should be guarded by railings and operators and foremen should see that they are thoroughly guarded. The reason for this is quite obvious, but here is where caution is necessary. The rails should be kept free from splinters, nails, bolts, wire or other obstruction liable to tear the flesh of operators or others when running the hands along the rail. It is the little things which cause the unnecessary accidents—nails, bolts or even grain left on stairways or landings are responsible for many a painful accident and I wish it were possible to impress upon the mind of each one here to "STOP, STOOP and PICK UP" anything you may see on the stairs which might cause an accident.

Electric apparatus is also decidedly hazardous—it should be and probably is well guarded and most men have a healthy respect for this unseen yet powerful and dangerous force. The elements of danger are not alone from coming in contact with bare wires or terminals, but the throwing in of a switch may mean a short circuit at the switch resulting in a blinding flash which leaves a most painful burn or temporary, if not permanent, damage to the eyesight. Fuses are put in the circuit to prevent accidents and fire, but it is well to remember that fuses are not infallible and caution should always be taken when replacing switches, particularly after a fuse has blown and been replaced.

Probably all of the elevators are protected against the possibility of throwing in a switch and starting machinery where the men may be working, but too much care cannot be taken to prevent accidents of that kind. The most effective precaution is to take out the fuses at the motor in addition to the usual caution signs used to keep the careless from starting up the machinery.

Thus far, I have dealt with a class of accidents which are not peculiar to grain elevators, but there are three classes of accidents which are peculiar to the handling of grain:

Belt Conveyors
Open Bins
Dust Explosion

Except that belt conveyors and the passages over them should be carefully guarded, there is little that can be said which is not quite evident. My advice would be "avoid a belt conveyor as you would an army mule's hind leg—don't step on it or kick it, unless you are looking for a long and painful vacation."

The open bin or the closed bin with its opening at the bottom and the hold of a vessel when elevating grain, are all practically in the same class, so far as accidents are concerned, and Buffalo Elevators can bear evidence to two or three distressing accidents due to moving grain. In one case, a workman working in a bin was sucked down into the bin and suffocated, due to someone taking grain out at the bottom without knowing anyone was in the bin. In a similar accident, the bin had to be opened at the side before the lifeless body could be removed—and quite recently, a fine young fellow (a scooper working at our elevator) jumped into the hold of a vessel too close to the marine leg, was drawn down and suffocated before it was possible to get at him. This type of accident is not at all frequent, but every now and then somebody is either thoughtless or "takes a chance," and the result is too often serious.

Probably more lives have been lost and certainly more property has been damaged by dust explosions

than by any other accident in grain handling plants.

We do not know the proportion of dust and air which will explode when coming in contact with flame, nor could we measure it if we did know, but we do know both by the many accounts of accidents of this character and the carefully prepared reports of the Government on the subject that a mixture of dust and air in certain proportions will cause a most disastrous explosion when brought in contact with flame. All of the different ways in which flame gets in contact with dust have been explained so often that it seems useless to dwell upon them here, but it should be constantly borne in mind that an open flame of any kind whatsoever is the most dangerous object that can find its way into a grain elevator or mill. Smoking, heated bearings and poor or neglected electrical apparatus or wiring are the most common causes of these dust explosions and a close second are the gasoline torch, kerosene lamp and spontaneous combustion of oily rags.

My attention has been called to the danger of towers being blown over by the wind and the proper method of anchoring, but this is almost entirely a property damage, and to that character of accidents

I have given little attention, as the personal injury is the subject assigned to me.

In conclusion, I again want to impress upon all, the great importance of the *personal* element in avoiding accidents. Once in a while we joke, in a good natured way, about efficiency experts, welfare experts and many other modern and effective agencies in the betterment of conditions, but it must be remembered that we of the operating end are not making a special study of accident hazards as are the efficiency and welfare men, and frequently the suggestions or rules laid down seem unnecessary, but do not overlook the one important fact that we can never replace the damage done in personal injuries, and if we cannot see the necessity of any particular order or suggestion, it is up to us to inquire into it so that we do understand it.

May I suggest as a most practical aid in avoiding accidents that each man consider it as much his duty as it is the foreman's, superintendent's, or welfare department's duty, to insist that not only he, but each of his fellow workmen shall live up to the safety rules for the protection and welfare of his associates.

Dust Explosions in Grain Elevators

The Dangers of Dust in Grain Handling Plants and Some of the Ways to Avoid Them

By DAVID J. PRICE†

THE investigations of dust explosions by the U. S. Department of Agriculture have been confined principally to explosions that have occurred during the handling or milling of grain or its products. They indicate that dust explosions can occur from the time the grain is harvested in the field until the finished product is manufactured in the industrial plant.*

The importance of effective dust explosion prevention in industrial plants can be more fully appreciated when we consider that more than 21,000 establishments in the United States alone, manufacturing products to the value of over \$6,779,449,000 annually, are subject to the dust explosion hazard. In addition to these manufacturing establishments there are 351 terminal elevators and approximately 20,589 country elevators. The total value of these terminal elevators, based on \$1 property value per bushel, has been estimated to be over \$262,000,000.

In recent years attention has been directed to disastrous losses from dust explosions that have occurred in certain grain-growing sections during the harvesting and threshing operations. In the Pacific Northwest, in the inter-mountain country between the Rockies and Cascade Mountains, particularly in what is known as the Palouse and Walla Walla grain-growing sections, extensive losses have been experienced from thresher explosions. These explosions occurred in the open field while the threshing machine was in operation. In many cases the fire following the explosion has spread to both the sacked and the unthreshed grain, causing great loss.

Going a step further, we find that dust explosions have occurred in country elevators during the handling of the grain during shipment to terminal markets. Although the explosions in country elevators have been less frequent, probably on account of the small scale of operation, investigations indicate that these plants are subject to dust explosions and that control methods should be adopted.

When we reach the large terminal elevators, we find that the hazard is greatly increased. Some of the most disastrous explosions on record have occurred in modern grain elevators in the terminal markets.

The explosions which occur from the time of threshing until the time of handling and storing grain in the terminal market are due entirely to the ignition of dust produced during the handling of the grain. This has been an interesting develop-

ment because it has not been many years since the grain industry felt that it was necessary to crush or grind the grain, thus releasing the starchy material contained therein, before it was possible for a dust explosion to occur.

From the elevators the grain goes into various lines of milling, such as flour, feed, cereal, starch, etc. All of these industries are subject to the dust explosion hazard and have experienced extensive losses. Explosions have occurred also from the following dusts: Sugar, cocoa, aluminum, magnesium, cork, wood flour, fertilizer, powdered milk, rubber, scapine, spice, sulphur, bark and many others. In fact, it appears that any type of industrial plant dust, with the exception of inert dust, such as shale or limestone, might be ignited readily, and under certain conditions produce disastrous explosions.

EXPLOSIONS IN GRAIN ELEVATORS

The first explosion of any importance in a grain elevator, reported to the Department of Agriculture, occurred in 1898 in Toledo (20 years after the flour mill explosion in Minneapolis), with the loss of 10 lives and injuries to five other persons. Thirty-six explosions have been reported since 1898. Up to 1916 the losses from explosions in grain elevators were not very great. In 1916 an explosion in an elevator in Illinois caused damage to the extent of \$600,000. The same year an explosion in an elevator in Baltimore caused the loss of seven workmen, injuries to 22 men, and a \$1,500,000 property damage. A dust explosion in an elevator in Brooklyn in 1917 caused the loss of \$1,750,000 and the destruction of grain equivalent to bread rations sufficient to feed 200,000 people for a year. In 1919 two disastrous explosions occurred—one in the Government elevator at Port Colborne, Ontario, causing the loss of 10 lives, injury to a similar number, and \$1,500,000 property damage, the other in an elevator in Missouri, causing the death of 14 workmen and extensive property damage. The most disastrous elevator explosion on record occurred in the Northwestern Elevator, operated by the Armour Grain Company, at South Chicago, Ill., March 19, 1921. All the workmen in the elevator at the time, six in number were killed. The total damage exceeded \$4,000,000. In 26 explosions in grain elevators, the damage has amounted to \$11,722,555, an average of \$450,000 for each explosion. In seven of these explosions, 67 lives were lost and 72 persons injured.

The immediate field of effort in industrial plant dust explosion prevention lies in the development of methods for dust explosion control in grain elevators. The large scale of operation, size of plants, large quantity of dust produced during the

handling, elevating, and storing of grain, and the introduction of new ignition sources make necessary thorough investigations of this particular phase of dust explosion control.

EUROPEAN EXPLOSIONS

Records of 24 dust explosions in industrial plants in European countries have been obtained. In 11 of these explosions, 91 lives were lost and over 200 people injured. In an explosion in a meal mill in Liverpool in 1911, 39 people were killed and 101 injured.

TOTAL OF INDUSTRIAL PLANT EXPLOSIONS

A total of 253 dust explosions in industrial plants in the United States and foreign countries has been reported to the Department of Agriculture. In 60 of these 397 lives were lost, and in 77 of them 668 people were injured. The total money loss in 120 explosions approximates \$30,282,000, an average of over \$252,000 for each explosion.

These losses do not include the losses in connection with thresher explosions or cotton gin fires, but are confined entirely to the losses occurring from dust explosions in industrial plants. In the Pacific Northwest thresher explosions and fires have resulted in approximately \$1,000,000 property damage, and losses from cotton gin fires in the South have been very great.

SOME OF THE CAUSES OF DUST EXPLOSIONS IN GRAIN ELEVATORS

A number of definite causes of dust explosions in industrial plants have been clearly established, but reference will be made only to those that have been most prominent in connection with recent explosions in grain elevators.

MATCHES AND SMOKING

It is no longer necessary to debate the possibility of igniting a dust cloud by a match struck by a workman. It has been proved in many instances in which dust explosions have occurred in various types of industrial plants. Explosions have been caused when employees struck matches to determine the amount of product in a bin or enclosure, thereby igniting the dust cloud in suspension. It is not necessary to mention these cases specifically, but it might be of interest to refer to another type of explosion involving a different kind of dust which occurred in a New Jersey warehouse. A workman threw a lighted cigarette stub on the floor at the time he and four other workmen were handling loose chlorate of potash. A fire quickly started in the highly combustible combination of wood, flour and potassium chlorate dust. The workman tried to stamp it out and an explosion resulted. The fire spread rapidly beyond control, so that the entire warehouse, together with large machine shops nearby, was destroyed. The loss amounted to over \$2,000,000 which was quite a price to pay for a little smoke by one of the workmen.

OPEN FLAMES AND NAKED LIGHTS

In the class of open flames may be included lamps, torches of various kinds, lanterns, gas lights, and candles. Many explosions and fires have been caused by the introduction or use of open flames and naked lights in dusty atmospheres. All types of open flames will ignite inflammable dust under favorable conditions. This includes not only flames which are entirely unprotected, as an ordinary fishtail gas flame or the flame of a match, but also protected and unprotected flames must be kept out of industrial plants where there is inflammable dust, if explosions are to be prevented.

A disastrous explosion in a starch factory was caused by a lantern while workmen were engaged in cleaning the starch driers. One of the survivors stated that he noted particles of starch dust circulating around the lantern, and then, as he expressed it, "The air all around the lantern took fire" and the flames surrounded him. In another case two workmen in a Buffalo mill were killed by ignition of a cloud of paper dust stirred up by cleaning a dust room in which a lantern was being used.

An explosion in a provender mill in Glasgow, Scotland, was caused by the ignition of a dust cloud near an open gas flame. In another instance a workman in a Buffalo mill in using an acetylene flame while doing repair work caused an explosion. The plant was shut down at the time and the workman was cutting a hole in the steel boot of an

*Price and Brown. Dust Explosions. National Fire Protection Association, Boston, Mass., July, 1922.

†From the address delivered at the annual convention of the American Association of Port Authorities, New Orleans, La., December 10, 1923.

elevator leg. After the cutting had been completed and the flame turned out, and while the operator was waiting for the metal to cool, another workman started to work on the casing at the head of the elevator. While hammering, a dust cloud was stirred up inside the elevator and an explosion resulted from the ignition of dust by the hot steel.

SMALL SCALE FIRES

In many cases explosions have followed small fires in industrial plants. If a fire is started in a plant where considerable dust is present and the dust is thrown onto the flames of the fire, an explosion follows. A large number of explosions caused in this manner have resulted in extensive property damage, in some cases in loss of life. Some explosions have occurred while firemen have been fighting the fire, supposedly due to stirring up a dust cloud by the stream of water. Such an explosion occurred during a fire in a linoleum factory in eastern Pennsylvania. A stream of water struck the cork dust, throwing it into suspension as the fire was burning. Care should therefore be taken in fighting a fire where inflammable dust is known to be present not to stir up the dust any more than is necessary. If it is possible to determine the location of large accumulations of dust, these should be wet down, directing the stream of water over and not toward them.

In a spice plant in Ohio, 4 firemen were killed and 14 injured during the progress of a fire which resulted from an explosion thought to have been caused by the falling of spice dust on the flames of the fire.

ELECTRICAL CAUSES

Electrical causes of dust explosions may be divided into two classes: (a) Electric sparks from motors, switches, fuses, short circuits, etc., and (b) the breaking of electric lamps, or fires caused by dust settling on the lamp globes.

For a time there seemed to be some doubt as to whether an electric spark would ignite dust. It is now known, however, that a much smaller spark than was thought possible will ignite certain dusts. The most disastrous dust explosion which ever occurred in an industrial plant in England was attributed to the blowing of an uncovered fuse on a temporary switch board at the very moment when a large belt broke and stirred up a dense cloud of the dust which had been allowed to accumulate in that portion of the plant. Thirty-nine men lost their lives and 101 were injured.

The series of tests conducted by the Department of Agriculture, in co-operation with lamp manufacturing companies, shows that explosions can be produced by the breaking of an incandescent lamp bulb in dusty atmospheres. It has also been found that under certain conditions a fire may result from the ignition of dust which accumulates on the globes of incandescent lamps. To guard against this danger, and also against the explosion hazard, all incandescent lamps in dusty atmospheres should be enclosed in vapor-proof globes and well guarded.

STATIC ELECTRICITY

The study of dust explosions in industrial plants has shown that static electricity is one of the causes of these explosions. It is safe to state that this hazard was not recognized until a study of industrial plant dust explosions began. More explosions in threshing machines have had their origin from static sparks than from any other cause. Static electricity may be generated several ways in operating processes. When the humidity is low, it can generally be found on most belts and sometimes on drive shafts. If the static cannot leak off the belt as fast as it is generated, in time the potential of the charge will become so great that it will cause a spark to jump to some object having a smaller potential or an opposite kind of charge. If this spark discharges through a dusty atmosphere an explosion may occur.

When any dust is blown in a cloud it imparts a charge of static electricity on each dust particle, the polarity and size of the charge depending upon the chemical composition and fineness of the material. In the filter type dust collector, the dust laden air is drawn through a porous cloth suitable for holding the dust but permitting the purified

air to pass through. If these collectors are not properly electrically grounded, a high static charge is built up, so that there is danger of static sparks passing from the cloth to the shell or some other part of the collector. Quite recently several explosions occurred from this cause in the collecting of dry lime sulphur. However, filter type dust collectors, as well as almost any other type of equipment, can and should be effectively grounded where explosive dusts and gases are present.

CHOKE-UPS AND FRICTION

Choke-ups in elevator legs, resulting in the rubbing of the elevator belt on the overhead pulley, have been the cause of explosions in grain elevators. In some instances the belt has rubbed on the pulley until it has worn completely through, and, dropping down the elevator shaft, has stirred up a dust cloud of sufficient size to result in a serious explosion.

A large number of dust explosions in recent years have originated in grain elevator legs. Every precaution should be taken to prevent choke-up friction, and all other possible sources of ignition.

(To be Continued)

A FAMOUS AUTHOR

To Charles J. Brand of the Department of Agriculture is given credit for the authorship of the McNary-Haugen bill, a measure which would put



CHARLES J. BRAND

American farmers into fellowship with the peasants of Russia to whom little is given and much taken away. Mr. Brand's name does not appear on the bill, to be sure, but that he is the real author seems to be generally accepted.

To those who have followed Mr. Brand's career, this does not occasion much surprise, for he has been a stormy petrel in the Department for some years and has been the instigator of several programs of radical tendency. These tentative steps in the direction of paternalistic government, to give it the mildest possible term, were possible only because Mr. Brand is a man of forceful personality, undoubted organizing ability of high order, and a set of brains that were not matched in the Department, and whose brilliance might be a constructive force in the country except for the queer slant which makes it impossible to distinguish between a pretty theory for academic discussion, and a working basis for practical government. Karl Marx introduced a theory; Lenine tried to make it work.

Mr. Brand, you remember, was at the head of the Bureau of Markets in 1917, when the Office of Grain Standardization, under the efficient administration of Dr. J. W. T. Duvel, was transferred from the Bureau of Plant Industry, to the Bureau

of Markets. This put the subject of dockage, over which there was some difference of opinion in the Department, in Mr. Brand's hands, and otherwise greatly extended the influence of the Bureau.

It was during his regime as head of this Bureau that the activity of county agents in organizing co-operative companies and even serving as active agents for such companies, became so aggressive and obnoxious that a protest arose from one end of the country to the other. This activity was not curbed until it was brought to the direct attention of the Secretary of Agriculture.

Mr. Brand made a determined effort to establish in the Department a reporting service to replace the crop reporting, statistical data and price records maintained and disseminated by the grain exchanges and other private agencies. All these were paternalistic plans which, inconspicuous individually, in the aggregate would have wrought great changes.

For some time Mr. Brand has been outside the limelight, but the McNary-Haugen bill has again focussed it upon him. If the bill passes, what more natural than that Mr. Brand, author of the bill, should represent the Secretary of Agriculture on the Commission to administer it. Once on the Commission, Mr. Brand would undoubtedly dominate it, and with that domination would come a power for good or evil greater than is wielded by any man in the country. Lenine had only his red army; Mr. Brand would have the law.

CORN BORER IS SCREENED

Of particular interest to Ohio and Michigan dealers is the announcement that the job of protecting America's greatest crop from the ravages of the European corn borer is visualized in a new United States Department of Agriculture educational motion picture, "Corn Borer Control in the Corn Belt."

The corn borer was first discovered in the United States in Massachusetts in 1917, but was also present in Ontario, Canada, at that time. It spread southwestwardly from Ontario, and is now attacking the eastern limits of the great corn belt in Ohio and Michigan. The picture tells how the Federal and state bureaus of entomology are tackling the job of controlling the "borer" co-operatively, and tells the corn belt farmer what he must do to prevent its spread to new territory and to keep it under control in infested areas.

Burning of stalks, cobs and nubbins in the field, the plowing under of the stalks left standing over winter, cleaning up the barnyard and pig-pen, employing the silo and shredder and other recommended methods of control are shown. Operation of quarantines to prevent corn on the cob being shipped out of the infested areas is also shown.

"Corn Borer Control in the Corn Belt" will be circulated through the educational film service of the Department and the co-operating state institutions. Copies may be borrowed for short periods, or may be purchased at the laboratory charge.

NEW CANADIAN WHEATS

Some of the new wheat varieties introduced in Canada give promise of improvement over the varieties commonly sown at the present time. One of these is "Garnet" introduced by Dr. C. E. Saunders. It has been grown at Brandon for six years. It averages an earlier maturity than Marquis by five or six days, and while it yields less per acre, shows 40 per cent less rust infection. Its milling qualities are excellent and other characteristics are desirable. "Reward" is another of Dr. Saunders' wheats, but has been grown only two years. It yields more and heavier grain than Marquis, is earlier in maturity by seven days and is of good milling quality. "Supreme" and "Early Triumph" are new introductions of Seager Wheeler, which gave remarkable results last year, each yielding over 50 bushels per acre. "Ruby" is not a new wheat, but has been grown for a number of years. It is earlier than Marquis but yields less. It has already been of considerable value in northern Manitoba.

NEWS LETTERS

BUFFALO

ELMER M. HILL CORRESPONDENT

INDICATIONS point to an early opening of the grain shipping season, on the Great Lakes. With mild weather prevalent during the greater part of the winter, grain shippers and vessel owners are inclined to believe that one obstacle which tended to retard the movement last season has been removed from their path. General conditions on Lake Erie are favorable, but according to reports received from ports on Lake Michigan and Lake Superior, the waters are inundated with drifting ice. Whitefish Bay is full of heavy windrowed ice with some clear ice about 10 inches thick. The eastern end of the lake is full of drifting ice. Portage River is full of ice drifting with the current and the harbor at Hancock is packed with drift ice. Another week or 10 days, however, of warm weather will clear up the ice situation on the upper lakes.

Elevators at Fort William and Port Arthur are crowded to capacity. The situation at the Canadian Head of the Lakes has reached the stage where it is impossible for the elevators, to take in any more grain unless they ship a similar amount out by rail. Had the blockade in the lake grain trade occurred a year previous, the elevators would have been taxed to capacity long before this. Storage capacity at the two ports was increased 6,300,000 bushels during the 1923 season, which brought the capacity of elevators at the Twin Ports up to an aggregate total of 63,690,000 bushels of grain for the 26 elevators in operation.

Construction of two new elevators and additions to other elevators brought about the increase in grain handling facilities. The two new elevators, the Bawlf and Stewart, each have storage room for 1,300,000 bushels. Additions to old elevators include enlargement of the Western Terminal elevator by 1,000,000 bushels, which gives it a total capacity of 3,000,000 bushels. Other old elevators enlarged include the Saskatchewan Co-operative No. 1 by 2,000,000 bushels, with a total capacity of 6,500,000 bushels; Saskatchewan No. 2 by 500,000 bushels, with total capacity of 1,170,000 bushels, and the Gillespie unit in Port Arthur by 200,000 bushels, with a total capacity of 600,000 bushels.

Taking the amount of grain in sight into consideration, chartering in the trade has been light and vessel men expect a good demand for tonnage during the early part of the season. If the start is late, some of the boats that usually take grain at the opening will not be available for that trade. Some managers are holding out for better rates than have been paid to date for cargoes to be shipped in the coming season. Most of the charters reported in the Lake Superior trade for the first trip were at 3½ cents. There has been little inquiry for tonnage in the Lake Michigan market.

The movement forward of grain at the lower lakes end of the route has showed a slight improvement but there is still quite a large amount afloat. About 60 vessels were holding storage cargoes at Buffalo, Erie, Fairport and Toledo early this month. Owing to the large amount of elevator room available at Buffalo, boats are being worked out on time.

John T. Cavanaugh, Federal grain supervisor for the port of Buffalo, has been elected secretary and treasurer of the Federal Business Association of Buffalo, whose members are engaged in Federal occupations in the city. There are 75 branches of the Government service in Buffalo of which the Federal grain supervisors' office is one.

Octave A. Bruso, who for many years was prominent in the Buffalo grain market in the Chamber of Commerce, died early this month at Haverstraw, N. Y., of pneumonia. For some time past Mr. Bruso was in a state sanitarium at Theills, N. Y. Mr. Bruso was 52 years old. Twenty years ago he played a prominent part in the Buffalo political life, having served as a member of the Common Council and the old board of aldermen. A few months after the outbreak of the war, Mr. Bruso joined the 5th battalion of the Canadian Expeditionary Forces and served in France. He was decorated for bravery twice, receiving British and French medals. Mr. Bruso was a

member of the Chicago Board of Trade, the New York Port Exchange and the Buffalo Chamber of Commerce. Besides his widow, he is survived by two sons, Gustave and Willis Bruso and four daughters. He was a brother of Dr. C. Frank Bruso of Buffalo. The body was brought to Buffalo for burial.

Representatives of Buffalo and Tonawanda grain interests were at Albany early this month to speak in favor of a state appropriation of \$300,000 to \$400,000 before the New York state legislature for the construction of a state-owned grain elevator at the western terminal of the New York State Barge Canal at Tonawanda. The bill providing for the appropriation was introduced by Assemblyman Edmund F. Cooke on behalf of the grain and shipping interests.

Bruce Jones of Hall, N. Y., was elected president of the New York State Seed Improvement Co-operative Association at the annual meeting held in Utica last month in connection with Farmers' Week at Cornell State University. Other officers elected were E. E. Hults of Marathon, vice-president; J. M. Hurley of Syracuse, secretary and treasurer; directors, Louis A. Tone of Perry, E. E. Hults of Marathon, Bruce Jones of Hall and F. C. Gibbs of Buffalo.

Completion of the new 1,000,000 bushel grain elevator at Oswego by August 1 by the state of New York, will greatly increase barge canal shipments next summer. The state-owned elevator will be capable of handling 40,000 bushels of grain hourly and will be one of the most modern in the United States. It is believed that a large part of the western grain diverted to Lake Ontario via the Welland Canal at Port Colborne and originally destined for Montreal will be shipped to Oswego for movement via barges down the New York state waterway to the Hudson river and New York.

The Arctic region around the Mackenzie River, 1,000 miles from Edmonton, Alberta, will be one of the greatest wheat producing sections of the world in the future, according to Mrs. Miriam Green Ellis of Edmonton, speaking before the Kiwanis Club of Buffalo on Canadian wheat and the development of the Arctic region. She said the plowing is done in the land of midnight sun by dogs.

William Davenport Olmsted, president and treasurer of the Niagara Falls Milling Company at Niagara Falls and an officer and director of other large industries in western New York, died last month in St. Augustine, Fla., where he had gone for a rest. The body was brought back to Buffalo for burial. Mr. Olmsted was born in New York city in 1842. He was educated in a private school on the Hudson River and came to Buffalo in 1878 and became associated with the firm of Schoellkopf & Mathews, flour millers. Besides his widow, Mr. Olmsted is survived by two sons, George William Olmsted and John Olmsted, and a daughter.

Much interesting data regarding the Canadian grain trade on the Great Lakes last season is contained in the annual report of William Livingstone, president of the Lake Carriers' Association, which has just been issued. The report says that the lack of export demand seems not to have affected the Canadian grain movement through the Quebec canals to Montreal, Quebec and foreign ports. Further sensational gains in this movement, he says, that for three years has been an overshadowing event in lake commerce, were made last year. Statistics furnished by Colonel A. E. Dubue, superintending engineer, show a total movement of 90,229,452 bushels from May to December as against 87,731,192 bushels for the same period in 1922. The report says undoubtedly it was the largest trade of its kind in history.

Although some grain was shipped from Lake Michigan, very little was loaded at Buffalo, so it was preeminently a Canadian trade emanating from Fort William, Port Arthur and Port Colborne, the report says. The large addition of capacity made to the Canadian fleet, improved elevator facilities at Montreal, and increased shipments to the port of Quebec, made it possible to handle with only slight congestion the monthly movement as follows:

May, 9,871,251 bushels; June, 12,779,578 bushels; July, 13,070,184 bushels; August, 15,310,419 bushels; September, 14,317,422 bushels; October, 11,644,287 bushels; November, 11,595,224 bushels and December, 1,241,087 making a total movement of 90,229,452 bushels.

The trade was distinctly a wheat movement, Mr.

Livingstone says, and undoubtedly the largest of which there is record. Wheat shipments totalled 64,023,345 bushels. Substantial gains also were made in shipments of oats, rye and barley. From the meagre movement of 89,928 bushels of corn in 1920 it jumped to a movement of 24,404,449 in 1921 and although it declined in 1922 with shipments of 13,173,628, in 1923 corn shipments via this route were only 1,567,407. The corn movement, the report says, has been so turbulent as to cause wide comment.

NEW YORK

C. K. TRAFTON - CORRESPONDENT

MEMBERS of the Produce Exchange were keenly interested this month in an official announcement that Remus Export Corporation had been prohibited representation on the Exchange. Primarily this prohibition was based on charges brought against it by L. E. Frankel, Inc. In a nutshell the basis of the charge was that the Remus concern had refused to accept delivery of 140,000 bushels of wheat tendered on contract by the Frankel house. It was averred that this failure to accept delivery was based on the contention that the Swiss Government had abrogated the contract which was made originally with the firm of Hennegan & Hess, which got into financial difficulties before the grain was shipped. Then L. & E. Frankel took charge and furnished the wheat and secured the freight room. In the meantime prices had declined sharply and then the original buyers refused to accept the grain.

F. S. Lewis, vice-president of the Chicago Board of Trade and a well known member of the grain trade here as well as there, being a member also of the N. Y. Produce Exchange, spent several days on 'Change lately having come East mainly to visit Washington on matters of interest to members of the trade not only in Chicago but all over the country.

H. J. Greenbank, an old and esteemed member of the N. Y. Produce Exchange and a member of the old flour receiving house of Bogert & Greenbank, received a warm welcome back on 'Change lately and was heartily congratulated on his improved appearance after a five weeks absence, accompanied by Mrs. Greenbank, in Florida and Hot Springs, Va.

H. A. Abbott, manager of the feed department of Albert Dickinson & Co., seed merchants of Chicago, was a caller on members of the trade in this territory early in the month.

Geo. A. Zabriskie, for many years head of the N. Y. office of the Pillsbury Flour Mills Company, and a director of that prominent organization, sailed lately for a six weeks trip abroad and will go as far as Egypt. It would be difficult if not impossible to name a man better known or more esteemed in the trade all over the country than Mr. Zabriskie. During the war he was an active member of the Food Administration, being active in sugar as well as flour.

E. A. Weaver, the general manager of the big mills of the B. A. Eckhart Milling Company, Chicago, was visiting members of the local trade early this month.

Robert E. Siglow has gone as export manager for the old flour house of Philetus Smith, now conducted by his son, Clarence H., as Mr. Smith senior has been inactive recently owing to his age although he is still as lively as a boy.

A highly interesting and unique occurrence lately was the clearance of the S. S. Val Skogland to China with 69,150 barrels of flour from Baltimore.

Henry A. Rumsey, head of the grain house of Rumsey & Co. Chicago, was visiting friends in the local market early this month.

F. O. Seaver, chairman of the Flour Committee of the Produce Exchange, who was the official buyer of flour for various relief organizations during the war, has been at it again lately having been buying

medium, and low grade flour for the relief of the hungry or starving children and women in Germany and possibly in Austria. This flour will be distributed through the American Friends Service Committee which excellent organization made such a praiseworthy record in Europe during the war.

Paul Picard, of Jackson Bros. Company, grain merchants on the Chicago Board of Trade and in the local market, was visiting friends in this market lately.

L. T. Sayre, chief cash grain handler of the Rosenbaum Grain Corporation, Chicago, spent a few hours recently with friends in this market.

Thos. A. Blake, head of grain receiving and export house of Blake, Dobbs & Co. has been resting for about a month in the South but mainly in Cuba.

H. S. Austrian, vice-president of Rosenbaum Bros., grain and feed merchants, Chicago, and manager of the feed department, was among the visitors in the local market last month.

Jas. K. Riordon, a prominent grain operator on the Chicago Board of Trade, was calling on friends on the N. Y. Produce Exchange last month.

Richard Uhlmann, secretary and treasurer of the Uhlmann Grain Company of Chicago, and son of Fred Uhlmann, president of that company, was a visitor in the local market last month.

A. S. Carter, a member of the Chicago hay trade, was calling on local dealers last month.

T. Bennett, with Jas. E. Bennett, grain merchants, Chicago and New York, was visiting the local market late last month.

E. J. Kuh, a grain trader in the Chicago Board of Trade, was visiting friends on the N. Y. Produce Exchange, late in February.

Jos. Faroll of Faroll Bros., grain merchants, Chicago Board of Trade, has been elected to membership on the N. Y. Produce Exchange.

Willard A. Cockley, who was a seller of flour in this market and connected with the office of A. J. Gardner of the Produce Exchange, committed suicide recently in his room in the Seville Hotel with a bullet. He was 65 years of age and was the son of Capt. D. L. Cockley, at one time president of the well known Shelby Mill Company of Shelby, Ohio, and was on the staff of Governor Asa L. Bushnell when the latter was governor of Ohio.

Geo. Roden, who has been associated, mainly as a broker, with several of the leading grain and feed houses in this and the Chicago market for over 30 years, recently went with David Colman, Inc., to take charge of the grain department.

Leon J. Gangler, who was with the old grain house, Nye & Jenks Grain Company, for 12 years or until they closed their New York office, has gone with the well known firm of Blyth & Bonner as assistant on the big floor of the Produce Exchange, to Frank J. Wagner, the firm's popular representative.

P. N. Gray Corporation recently became the title of the former firm of P. N. Gray & Co. Inc., grain merchants and exporters of commodities generally. It will be remembered that this house did a huge business in exporting grain, etc., during the war. Lately the firm moved to 25 S. William street in order to be near the J. Henry Schroder Banking Corporation of which P. N. Gray is also president.

Frank H. Hodgkinson, who was in the London office of Sandy & Co. Ltd., the old export house, has recently been elected to membership in the N. Y. Produce Exchange where he will act as representative of that concern.

Among the firms recently formed in the local flour market was that of the Halboth-Coans Company, which has offices in the Produce Exchange. Mr. Halboth was previously vice-president of the H. R. Gordon Company, flour receivers.

Members of the flour, feed and grain trades in this market, and notably on the N. Y. Produce Exchange, were sorry to hear late last month of the passing away of another old time prominent figure, John Valentine Hecker, aged 76, who died at his home in Greenwich, Conn. Mr. Hecker was born in N. Y. City, December 25, 1848, and graduated from Columbia College in 1869.

In 1874 he became a member of the Gov. V. Hecker & Co., millers and in 1888 became president. When the merger of the Hecker-Jones-Jewell Company was made in 1892 he became president of the merged firms and retained that position until ill health compelled his retirement in 1897.

In 1874 he was a member of the Board of Educa-

tion of N. Y. City and in 1880 he became a member of the Board of Managers of the N. Y. Produce Exchange and later was its secretary. Mr. Hecker was a member of the Union League Club of New York, and of the General Society of Mayflower Descendants, he having been a descendant of John Rowland who came over in the *Mayflower*. He was the grandson of John Hecker who installed the engine in Robt. Fulton's steamboat, the *Clermont*. He leaves his wife and five children.

MILWAUKEE

C. O. SKINROOD CORRESPONDENT

THE small grain marketing about which traders have been complaining for many months has been largely relieved, according to the February figures on receipts which have just been announced by Harry A. Plumb, secretary of the Milwaukee Chamber of Commerce. The better showing that was made last month was due almost entirely to the heavier marketing of corn which has been an outstanding feature of grain trade for the last few weeks. The receipts of wheat at Milwaukee for the past month were 162,400 bushels as compared with 256,200 bushels for the corresponding month of last year; corn, 3,362,600 and 2,433,000, respectively; oats, 1,317,800 and 2,149,400; barley, 768,000 and 658,880; and rye 260,360 and 370,730 bushels for February this year and last respectively.

The shipments of grain from Milwaukee for the past month are what might be expected from the figures on receipts. The shipments of wheat from Milwaukee in February were 184,275 bushels; corn 1,003,363; oats 1,328,000; barley 273,980; and rye 42,280 bushels.

Figures of the Milwaukee Chamber of Commerce show a sharp increase in the supply of hay as compared with last year, February's figures being 1,859 tons as contrasted with 850 tons a year ago. Hay receipts were considerably more than double those of a year ago.

Hay shipments on the other hand show a decline with 468 tons as compared with shipments of 1,488 tons for the corresponding month of a year ago. Shipments were only about one third of those of last year. Taking last month's hay trade alone, the receipts were 1,800 tons and shipments about 400 tons.

Flour receipts for the past month at Milwaukee have been exceptionally heavy with 114,770 barrels as compared with receipts of 48,250 barrels for the corresponding month a year ago. The flour receipts were considerably more than double those of last year. The shipments of flour from Milwaukee for the past month were 31,460 barrels as compared with shipments of 63,320 barrels for the corresponding month a year ago.

The receipts of feed at Milwaukee for the past month were 3,780 tons as compared with receipts of 480 tons for the corresponding month a year ago. The shipments of feed were 21,306 tons as compared with shipments of 30,652 tons for the corresponding month a year ago.

Grain prices at Milwaukee make the best showing for many months, almost all of the principal grains reflecting higher prices than prevailed a year ago. Barley makes the best showing in prices with the market 15 per cent above last year. Corn is ruling about 9 per cent above 1923. Third in gains comes oats with an advance of 6 per cent and wheat trails at the bottom with a gain of about 1 per cent. Rye is the only one of the five grains to show a decline with a loss of approximately 13 per cent.

The steamer A. M. Beeb has been loading 280,000 bushels of corn at the Chicago, Milwaukee and St. Paul Elevator "E" for eastern shipment just as soon as navigation opens. This will be the first boat of the season at Milwaukee.

The March rate of interest has been fixed by the Finance Committee of the Chamber at 6½ per cent. This is the same rate which has prevailed for months.

Three new members have been added recently to the rolls of the Milwaukee Chamber of Commerce. They are Joseph R. Schaber of Milwaukee and R. W. Little and Robert F. Nicolai, both of Minneapolis.

Milwaukee grain handlers have been delighted with the fine showing made by the Milwaukee market in way of corn receipts in February. The prices prevailing here were reported as well above those ruling at other markets on an equal freight basis. The high prices are reported as the principal factor in attracting large corn supplies to this market.

Elevators and the big corn industries have been heavy buyers of corn. The quality of the corn received here has also been high and this has been

a material factor in the brisk market which has prevailed. The lower grades of corn have also been in excellent demand, making an all around demand which has been noticeable for its strength.

The Milwaukee Chamber of Commerce has issued a statement urging the careful testing of seed corn before planting time. The details of how seed may be tested are included in the warning issued.

The La Budde Feed & Grain Company has published a chart showing the comparative prices of feeds and grain over a period of years. The general trend of feed prices is evident at once by a glance at this chart. It is issued from time to time for the guidance of the handler of feeds.

Among the Milwaukee grain men who went up to Minneapolis to attend the meeting of Farmers Elevator Managers of Minnesota and of the Tri-State Grain Dealers Association were A. E. Bush of the Bush Grain Company, J. P. Hessburg of the Froedtert Grain & Malt Company and Frank B. Bell of the W. M. Bell Company.

William George Bruce, Milwaukee Harbor expert, in an address here, urges that the essential growth of commerce on the Great Lakes depends very largely on better terminal facilities. Mr. Bruce is an enthusiast on the promotion of heavier grain shipping and more commerce generally on the lakes.

"The cities bordering on the lakes have scarcely realized their part in the development of a lake commerce," said Mr. Bruce. "This applies with greater force to the port cities on the American side of the waters. They have been inclined to leave the job to private enterprise and to Uncle Sam and have given little aid and encouragement toward improvement of port facilities."

The chief inspector of grains at Milwaukee, Allen A. Breed, has issued a list of figures showing just how many car inspections at Milwaukee in 1923 were appealed to the Federal Grain Supervisor. This table shows that more than 60,000 cars of grain were inspected during the calendar year and that only 489 car inspections were appealed during that time.

Of the 489 inspections which were appealed, no less than 382 original gradings were sustained, so that 78 per cent was the percentage of gradings sustained.

The record during the month of December, 1923, as reported by Mr. Breed, was even better. During that month the number of inspections appealed was 192 cars out of about 5,416 cars and of this total, 177 inspections were sustained. So that of the contests, 92 per cent of the total number were sustained and only 15 cars, or 3 per cent, were changed.

Secretary Harry A. Plumb of the Milwaukee Chamber of Commerce does not think that the change in the wheat tariff, the increase from 30 to 42 cents a bushel, is going to have much effect.

He made the following statement "Whether the increase in the tariff on wheat to 42 cents a bushel, as announced in the press, will prove to have any beneficial effect for the farmer, is an open question. As a matter of fact the announcement of the new tariff has not caused any advance in the wheat market so far.

"The general feeling is that it will not have any great effect on prices. Our duty on wheat of course concerns the importation of Canadian wheat chiefly. It may surprise some people to know that from July 1, 1923, to date there have been imported from Canada only a little more than 8,000,000 bushels of duty paid wheat."

One of the largest flour handlers in Milwaukee declares that the immediate trend of wheat and flour prices, because of the increase in the tariff, is going to be upward. He explains that the big American milling firms have set a high standard of flour, a flour which is strong in gluten content and which is required by the bakers to get a grade of flour which will absorb a high rate of moisture. This standard is going to be maintained, he says, even if they have to import more and higher priced Canadian wheat to get it. This will mean a corresponding increase in the cost of flour, he maintains, but the baker can afford to pay it because he gets larger bread returns correspondingly.

This flour expert also declares that Durum flour is especially scarce and hard to get with a higher tendency in prices. He maintains that there are many kinds of Durum wheat and the farmer is careless in his choice of Durum and does not always pick the Amber Durum, which is the kind which the macaroni makers must have.

This flour handler also declares that a large number of mills have gone bankrupt in the last few years, largely because they could not get the right kind of wheat and could not keep up their flour standards on a uniform basis. The big millers, he said, those with the leading brands, will keep up their flour standard and they will continue to buy as much Canadian wheat as is necessary to do that even though prices are raised by the tariff.

While the higher wheat and flour tariff will raise

prices at least temporarily, he adds, the long range effect is more problematical. It will depend, he believes, on how scarce wheat becomes in the United States and how much stock the farmers take in the propaganda now being circulated to cut down wheat acreage. Unquestionably, this flour man says, there is going to be an important cut in the wheat area during the present year.

Milwaukee flour stocks are down to low levels again after having been high two or three months ago. The local stocks of flour on March 1 were given at 13,000 barrels in round numbers as compared with 11,000 barrels a month ago and 11,000 barrels a year ago, 13,000 barrels two years ago for the same date, 22,000 barrels three years ago, 19,000 barrels four years ago and 14,000 barrels five years ago. The supply of flour is now not far from normal.

A. J. Hinton is the new representative of the W. M. Bell grain company at Sheldon, Iowa. The company now has seven branch managers, three in Iowa, three in various sections of Minnesota and one in South Dakota.

Henry Rang & Co., have moved their offices from 505 Mitchell Building to Rooms 303 and 304 in the Chamber of Commerce Building.

DULUTH

S. J. SCHULTE CORRESPONDENT

NO CHANGES were reported in memberships of corporations or in the personnel of firms operating on the Duluth Board of Trade during the last month. While trade has been dull with a light movement of grain from the country and speculative operations in the pit have been curtailed, dealers are hanging on in the hope that the wave of hysteria that is being fanned in political quarters to gain farmers' votes will have expended itself in due course and that thereafter the grain trade will be permitted to function more normally. Elevator companies here with interior houses over the West are disposed to take a more hopeful view of the situation by reason of their having been in receipt of many communications recently from farmers over western Minnesota, North Dakota and Montana to the effect that they propose to have their grain handled through the regular trade channels during the coming season rather than to tie up with co-operatives as they are now being urged to do. Grain men on this market are pinning their faith upon the relaxation sooner or later, of some of the onerous provisions of the present Futures Trading Law that have been found to operate against the best interests of wheat growers through restricting speculative operations in the grain markets and thus bringing about lower price levels through limiting buying power especially during the fall crops moving period.

The recent death of B. J. Crowley, who for 22 years had been superintendent of the Great Northern Elevator Company's Elevator "S" at Superior, was learned with deep regret by a wide circle of personal and business friends. He was regarded as one of the best posted men in the elevator trade at the Head of the Lakes and the efficiency of his house was credited largely to his careful supervision.

Charles Owen, manager of the Atwood-Larson Company's business at Minneapolis, was a recent visitor on the Duluth Board of Trade. While admitting that business is quiet down in Minneapolis, he expressed himself as hopeful of better things in the future to follow the gradual readjustment of the farming industry over the Northwest upon a more normal basis. While wheat growing may be expected to be cut down, he looked for commission houses to derive benefit through more extensive growing of coarse grains and their consequently cutting a more prominent figure in marketing operations.

Percy H. Ginder, secretary of the Barnes-Ames Company, and wife, are away on a six weeks West Indian trip. Ward Ames, vice-president of that house, and family are spending a vacation at Florida winter resorts. It has been noted that migrations of grain operators on this market upon European trips and to winter resorts have not been as frequently recorded this season as they were during the days when trading was not held down through restrictive regulations and operations were upon a heavy scale just prior to this country's entry into the war in 1917.

Operators on this market have been gratified through the success attained in their reaching out for a share of the corn handling trade. As a result of the substantial movement of corn this way during the last month stocks of it in the elevators here now aggregate over 4,300,000 bushels and predictions have been made that more than 6,500,000 bushels of that grain will be on hand here for ship-

ment to the East around the opening of navigation. The improvement in the movement of corn to this market is attributed by dealers largely to growers and interior elevator interests discovering that the Duluth price on corn gives shippers better results than at Minneapolis over territory that carries a slight advantage in freight rates. Shippers are also having it brought home to them that commission rates for handling corn are $\frac{1}{4}$ -cent lower in Duluth than at Minneapolis. Up to the present considerable corn has been sold in Minneapolis to be run to Duluth that could more advantageously have been sold direct on this market. Grain men at Duluth have been gratified lately over having established a record for holding the largest elevator stocks of corn in the country. All the stocks of corn in the elevators here are earmarked for shipment East at the opening of navigation.

Generally speaking the opinion is held in commission and elevator trade circles here that the increase in the rate of duty on imports of wheat from 30 to 42 cents a bushel was a bad move in that it regarded as certain to raise the price of flour to the consumer and that the milling interests will be hampered in disposing of their stocks of millfeeds through the duty reduction of 50 per cent on them. An official of one of the Duluth milling companies pointed out that American millers have been finding it necessary this season to use a percentage of Canadian wheat in order to bring their flour outputs up to grade on account of the shortage in supplies and the light weight grain of last season's American Spring wheat crop. It is being taken for granted that all the Canadian wheat held in bond at terminal elevators in this country will be picked up by millers and cleared before the higher rate of duty becomes operative.

The opinion is gaining ground that no matter what may happen elsewhere the acreage seeded to Spring wheat over the Northwest this spring will be increased. That will be due to the remarkable increase that has come about in the demand for Durum flour, both for domestic consumption and for export largely to Italy. Three or four operators have been steadily acquiring supplies of Durum on this market during the last few weeks and two of them are credited with having substantial paper profits piled up on their holdings. In addition they have been able to realize on some lines during the last 10 days. As a rule, however, Durum trade specialists are sanguine that higher prices will be set yet in view of the light supplies remaining in growers' hands, and the estimated requirements of exporters and millers between now and the marketing of the new season's crop. Millers here have been paying as high as 12 cents over the May price for No. 1 Amber Durum during the last few days.

R. M. White of the White Grain Company expressed himself as feeling sanguine regarding the development of market operations in coarse grains during the next few months owing to the increased attention likely to be given to mixed farming over the Northwest during the coming season. His house has been in receipt of some eastern inquiry in that line that promises to develop into fair business next fall provided negotiations looking to the establishing of lower freight rates direct from here to New York via the New York State Barge Canal, are successful.

With a view to expanding its operations in the hay trade Mr. White's house has engaged Nelson G. Smith, formerly Idaho state deputy hay inspector, as manager of that department. The steady expansion in the dairying industry is leading to a broadening demand for hay and feeds from that quarter which Mr. White desires to cater to.

Shipping men at Duluth are hustling for grain cargoes for loading at the opening of navigation. A rate of $3\frac{1}{2}$ cents a bushel is being maintained from here for Buffalo delivery, and a number of boats have been chartered so far to load Durum and Spring wheat. The opinion in grain trade circles here is that ample boat tonnage will be offering to move grain this season though the demand for space to handle iron ore promises to be active. Stocks of all grains in Duluth and Superior elevators now aggregate over 21,000,000 bushels, and with the maintenance of the present rate of increases in stocks of around 1,000,000 bushels a week, it is estimated that the houses here will be fairly well filled at the opening of navigation. Should additional space be required six freighters that have been wintering in this harbor will be available to load grain.

Business in rye has been stagnant on this market during the last several weeks and holders are beginning to wonder where they are likely to stand in view of the limited export inquiry for that grain which specialists in that market attribute largely to offerings of Russian rye in the consuming countries of Central Europe. Conditions appeared to be shaping up nicely in the rye trade up to late last fall, according to dealers. At that time they felt sanguine of readily disposing of the bulk of their holdings to German buyers. Reports of Russian offerings at lower prices then came out, and that

proved to be an unsettling influence. A weak tendency has been shown for some time but specialists in the rye trade are of the opinion that the bottom has been struck in its quotations and purchases from an investment point of view have been advised in some quarters. The ground for the more bullish feeling is that current prices are below a cost of production basis and that European demand might be expected to pick up in the event of any results being attained by the reparations committee in its efforts to bring about a settlement of the Franco-German tangle. Unless rye prices improve materially between now and seeding time it is being taken for granted that the acreage seeded to that grain over the Northwest will be materially curtailed.

Stocks of rye in Duluth elevators now aggregate around 7,400,000 bushels, and interests who took the hedging sales will be faced with sizable losses unless the market in that grain is marked up from its present level.

PHILADELPHIA

T. A. SIEBER CORRESPONDENT

ACCORDING to the monthly statistical report of the Commercial Exchange, the stocks of grain in public warehouses in Philadelphia on March 1 were: 1,486,876 bushels wheat, 252,094 bushels corn, 120,121 bushels rye and 2,912 bushels barley, compared with 1,851,203 bushels wheat, 419,334 bushels corn, 122,620 bushels oats, 79,968 bushels rye and 30,988 bushels barley on February 1, and 2,027,632 bushels wheat, 221,049 bushels corn, 885,955 bushels oats, 39,457 bushels rye and 4,360 bushels barley on March 1, 1923. Receipts of grain at Philadelphia during the month of February, 1924, were 2,689,094 bushels wheat, 534,405 bushels corn, 110,264 bushels oats, 1,823 bushels rye and 16,427 bushels barley. Exports from the port during the month of February, 1924, were 2,866,118 bushels wheat, 591,437 bushels corn, 19,286 bushels rye and 44,372 bushels barley.

New memberships have been petitioned for in the Commercial Exchange by Cramp & Cramp, grain, feed and hay merchants, proposed by D. J. Sullivan and E. M. Richardson; F. Jarka Company, Inc., steamship terminal operators, proposed by N. A. Lund and Chas. I. Rini; Louis Burk, Inc., provisions, proposed by W. T. Riley and Frank C. Reed.

John A. Killpatrick, hay merchant in the Bourse, has returned with his wife from a three weeks visit at Miami, Fla.

Harry Beidler, grain, and flour merchant, recently left with his wife for a visit at Miami, Fla.

Ellis McMullin, hay merchant of this city, left about a week ago for a two months visit at Walton, Fla.

Suit has been entered in the Common Pleas Court of this city by the James H. Gray Milling Company, of Springville, N. Y., against C. S. Coleman & Co., to recover \$4,560, alleged to be due account of violation of contract.

Milton F. Baringer, feed merchant in the Bourse, recently left with his wife for several months visit at Miami, Fla.

Walter K. Woolman, grain merchant and head of Woolman & Co. in the Bourse, left a few days ago for several weeks stay at Tampa and Jacksonville, Fla.

After being confined to his home due to an operation, J. Walter Passmore, grain merchant, has again returned on the Exchange floor.

Ellis McMullin, grain, feed and hay merchant of this city, was recently elected to membership in the Commercial Exchange.

Hyman Price, flour merchant, has entered suit in the Philadelphia Municipal Court against the Oxford Bakery of this city, to recover \$397, alleged to be due to flour.

At a recent auction held in the Bourse, 10 shares of the William Freihofer Baking Company preferred stock was sold at \$95.50 and 55 shares of preferred stock of the Freihofer Baking Company were sold at \$94.25.

M. C. Ellis, grain shipper, Chicago, Ill.; H. P. Mueller, manager, Milwaukee Grain & Feed Company, Milwaukee, Wis.; M. Peters, of the M. C. Peters Milling Company, Omaha, Neb.; Fred Hall, grain shipper, Des Moines, Iowa; M. P. Fuller, sales manager, Everett, Aughenbaugh & Co., Waseca, Minn.; H. P. Gallaher, vice-president and manager, Northwestern Consolidated Milling Company, Minneapolis, Minn.;

Philip Little, Jr., flour merchant, Minneapolis, Minn.; Martin Luther, vice-president, Minneapolis Milling Company, Minneapolis, Minn.; visited the Commercial Exchange in the Bourse during February.

Irving A. Collins, of J. C. Collins & Co., grain and feed merchants, recently left with his family for a month's stay at Miami, Fla., here he is interested in an improvement and development company.

The Pennsylvania System has placed an embargo No. E-8, which covers shipments of hay from all points to all consignees for team track delivery at 30th and Market streets, 31st and Chestnut streets and Merchants Warehouse Company, at the latter point on car delivery.

The Commander Flour Company has entered suit in the Philadelphia Municipal Court against Albert W. Wolfert to recover \$254, alleged to be due for merchandise.

Howard F. Brazer, of Wm. P. Brazer & Sons, grain merchants in the Bourse, has been appointed by the Board of Directors of the Commercial Exchange to fill the vacancy of H. J. Horan, recently elected president, for a one-year term.

Those interested in doing business with other countries will no doubt be glad to communicate with the Philadelphia Commercial Museum, 34th and Spruce streets, Philadelphia, Pa., in answer to inquiries received by them. In reply please mention the number of item.

41,722, Bagota, Colombia. "Please note that I am interested in wheat and offer my services as representative in Colombia." Correspond in Spanish.

41,731, Christiania, Norway. "Am interested in flour and am trying to get connections in the United States." Correspond in English.

41,740, Colombo, Ceylon. "We are brokers and commission agents and do not import goods on our own account, but we are interested in the importation of flour." Correspond in English.

41,760, Las Palmas, Canary Islands. "Kindly furnish me with the addresses of producers and exporters of flour." Correspond in Spanish.

41,663, Matanzas, Cuba. "I wish to obtain representations in the United States for wheat, flour and corn." Correspond in Spanish.

41,664, Santiago, Cuba. "Am particularly interested in wheat flour." Correspond in Spanish.

41,674, Palermo, Italy. "Am interested in securing the agencies of the following houses in your country: wheat, corn, oats and wheat flour." Correspond in French.

41,682, Havana, Cuba. "I am interested in representing firms exporting, directly, corn and wheat flour." Correspond in Spanish.

William F. King has entered suit in the Municipal Court of Philadelphia against the Enterprise Cake Company of this city to recover \$260, alleged to be due account of violation of contract.

Harry, David and Joseph Wolbromsky, trading as the Oxford Bakery of this city, have filed an involuntary petition in bankruptcy. The creditors named are Philip Kutner, \$1,099; Louis Shultz, \$729; and Leiser Wolbromsky, \$1,000.

Among those visiting the Commercial Exchange during the past month were Roy J. Stott, flour importer, Danzig, Europe; Theodore F. Ismert, of the Ismert-Hincke Milling Company, Kansas City, Mo.; J. A. Walter, of the J. A. Walter Milling Company, Buffalo, N. Y.; John B. Dougherty, secretary and treasurer, Dixon Mill & Grain Company, Scranton, Pa.

The United States grades for hay, which were revised by the U. S. Department of Agriculture on February 1, having been adopted at a meeting of the hay and straw trade of this city and ratified by the Board of Directors, were in force and binding upon the members of the Commercial Exchange on February 25.

The number of cars unloaded at the Girard Point Elevator during February, 1924, was 895 wheat, 198 corn and 1 rye; at the Port Richmond Elevator, 666 wheat, 90 corn and 11 barley; at the Twentieth Street Elevator, 1 wheat, 11 corn, 29 oats, 1 rye, 1 barley, 3 mixed grains, 2 kafir-corn and 1 buckwheat.

The average high and low closing prices of cash grain at Philadelphia during the month of February, 1924, were as follows: Wheat, No. 2 Red, for export, \$1.13 to \$1.21½; Corn, No. 2 Mixed, for export, \$0.90 to \$0.92½; No. 2 Yellow, for domestic, nominal; Oats, No. 2 White natural, as to location, \$0.58½ to \$0.60; Rye, No. 2 Western, for export, \$0.76 to \$0.79½; No. 2 near-by, for export, \$0.71½ to \$0.75½.

The annual meeting of the stockholders of the Merchants Warehouse Company was held late last month and elected Harvey C. Miller, Samuel Bell, Jr., J. B. Hutchinson and S. Townsend Zook as directors. A few days later the directors held their annual meeting and appointed the following officers

for a one-year term: Harvey C. Miller, president; Samuel Bell, Jr., vice-president; George M. Richardson, general superintendent and treasurer; S. Townsend Zook, secretary.

The Norris Grain Company and John A. Tait have proposed the Continental Grain Company, grain exporters, 210 Produce Exchange, New York, N. Y., for membership in the Commercial Exchange.

The acreage devoted to wheat on Columbia County (Pa.) farms this year is less than in the last 12 years, according to the county farm bureau, and the reason given is that wheat has been found less profitable than other crops, notably potatoes, on which an average value of \$135 per acre was placed last year, in comparison with about \$24 an acre on wheat.

LOUISVILLE

A. W. WILLIAMS - CORRESPONDENT

BUSINESS with the Louisville hay and grain trade, and elevator industry has been fairly active over the month, daily movement having held up nicely, with a fair movement both inbound and outbound. Corn movement has been better, and corn is now much drier than it was and easier to handle, resulting in the volume of corn moving through driers having been materially reduced. Wheat movement has been slower, due to the fact that millers are cleaning up stock in hand, and not buying much wheat except on the dips in the market. There are a good many millers which have buying orders placed at under the market, but who are not showing any wide amount of interest in purchase of supplies at the premiums quoted on No. 2 Soft Winter wheat.

Movement of seed oats has started and local elevators have been sacking out a good supply of oats for meeting this demand. Rye will start moving a little later. Indications are that there will be considerable rye and oat planting this spring, as it is said that wheat, rye and winter turf oats have been badly damaged by the severe freezes and thaws of the past two months, during a period when there was very little snow coverage.

Reports of farmers from out in the state are to the effect that wheat, rye and cloverage acreages are in bad shape, and that a lot of land will have to be replanted. In view of the fact that wheat acreage was materially reduced to start with, this will indicate that the wheat crop will be quite short in this vicinity. State and Federal reports show that pastures are badly winter killed, and that the sheep industry has been hard hit in this connection. Field seedsmen report excellent sales on field seeds at the present time. Bad weather in the fall, followed by freezing weather, held down winter plowing to a minimum, the volume of winter plowing being smaller than for years past.

The Kentucky Public Elevator Company reports fair storage stocks for this season of the year, with a quarter of a million bushels of grain on hand, including 145,000 of corn; 60,000 of wheat and 45,000 of oats, in addition to a small stock of rye. Daily handlings are running from eight to 15 cars in, and about as much are out. Wheat holdings are being gradually reduced as millers run low on stocks, and transfer to their own elevators. The company's drying business has been materially reduced of late, as a result of new arrivals of corn being in much better shape.

The local grain market is quoted with No. 2 White corn at 87 cents; No. 2 Yellow corn, 86½ cents; No. 3 Mixed, 86 cents; No. 3 White, 86½ cents; No. 3 Yellow, 84½ cents; Oats, No. 2 White, 54 cents; No. 3 White, 52½ cents; No. 2 Mixed, 52 cents. On local wheat some mills are offering \$1.16 a bushel, but wheat from primary markets is costing from \$1.22 up.

Hay quotations show No. 1 Timothy, \$25.50 a ton; No. 2, \$24.50; No. 3, \$20; No. 1 Clover Mixed, \$24.50; No. 2, \$21; No. 1 Clover, \$25; No. 2, \$24; Alfalfa, \$20 to \$24; wheat straw, \$13@14; rye straw, \$15@16. Some low grade hays are offered at \$16@18. There is some variations in hay prices, both higher and lower than these quotations.

Feed prices are largely a question of how badly the miller may need business. Mills have been busy and production good, but on the other hand shortage of winter pasturage has made for heavier than normal consumption. Some mills are quoting mill-feeds at \$30, \$31 and \$32 a ton, for bran, mixed feed and middlings respectively, while some mills are asking as high as \$33 for bran, in 100-pound cotton-sacks; and \$37 for middlings. However, it is doubtful whether they are getting much above \$33@34 for the best of feed. Corn millers are quoting meal at

\$2.30 a hundred; cracked corn, \$2.05; sacked hominy, \$2.35; hominy meal, \$2; feed meal, \$2; scratch meal, \$2.25; and baby chick feed, \$2.35. Short patent flour is \$7.25@7.40 for best grades; long patent, \$5.50@5.65; and low grades, \$4.50@5.00.

Some interesting photographs recently appeared in a local newspaper's rotogravure section, showing the wrecked mill building at Crider, Ky., and the damaged boiler, which was blown through the side of the building, and said to have traveled 185 yards. Five men were killed in the explosion. The photo of the boiler shows a number of the tubes protruding from the boiler head, indicating that it was the tubes that let loose.

The S. A. Mahew feed and grain store at Franklin, Ky., was one of several stores destroyed by fire on March 1, in a \$40,000 fire, the second bad fire in the city since the first of the year.

House Bill, 559, Representative Gartin recently introduced in the Kentucky General Assembly, reads: "A bill protecting livestock from injury by the use of metal clips and tags on bags or other receptacles, containing commercial feed." Penalties are provided. However, the bill was introduced so late that it is not likely to get into action. Over 1,000 bills have been filed.

Horse racing in Kentucky is safe for democracy for at least two more years, the Kentucky Senate having killed legislation to stop horse racing, after the House had passed such a bill. This would have been a hard blow to the breeding industry of the state, and to the hay and feed interests in the racing towns.

It is claimed that farmers of the state are warmly backing House Bill, 237, to make 67 pounds as the weight of a bushel of corn in the shuck. E. D. Morris, Warren County, who introduced the bill, claims that it is the first time an effort has been made to establish a legal weight on corn in shuck in Kentucky.

Complaint of Callahan & Sons, Louisville, before the Interstate Commerce Commission, Washington, D. C., was dismissed on February 13, the complaint involving rates on grain from East St. Louis to Louisville and re-shipped under milling in transit to New Orleans for export.

W. A. Thomson, head of the W. A. Thomson & Co., grain and elevator business in Louisville, and Mrs. Thomson are spending a few weeks at Miami, Fla.

Oscar Fenley, head of the Kentucky Public Elevator Company, Louisville, and Mrs. Fenley, left March 1, for Eau Gallie, Fla., to spend a few weeks with S. T. Ballard and Mrs. Ballard, Louisville, Mr. Ballard being head of the Ballard & Ballard Company, Louisville.

Farmers of the state are feeling rather cheerful over reduction of real estate taxation from 40 to 30 cents per \$100 of valuation, this having been a bill that was warmly backed by the agricultural interests of the state. Reduced taxation is one of the most important issues before the country.

J. W. Morrison, of the Lexington Roller Mills, Lexington, Ky., was one of the principal speakers at the annual meeting of the Credit Men's Association, Kentucky, on February 22, at Louisville.

CINCINNATI

HARRY A. KENNY - CORRESPONDENT

THE wheat market was easier inclined during the past month and would probably have ruled lower had it not been for the impending increase in the import duty on Canadian wheat and the political news from Washington with respect to the various farmers' relief bills. Light farm stocks and the possibility of crop damage was a sustaining influence of the cash situation, but the demand here was comparatively good and shipments to southern mills in the aggregate were larger than the month previous. The flour business was unimproved, but millers showed more disposition to increase their stocks. There was also considerable wheat bought by mills because of advantageous billing and as a whole a fair volume of business was reported. Prices were practically unchanged.

The bearish sentiment generally prevalent in corn and apparent lack of demand for shipment and local consumption caused an extremely dull situation and prices suffered losses of 3 to 4 cents for all grades. Receipts were liberal and with a somewhat congested condition at elevators, and ample supplies of industries together with a belief that

there will be an opportunity to buy corn cheaper were also depressing influences. Ear corn was also easier.

A resume of the hay market during the month showed a gradual reduction of the accumulated offerings which had depressed the market during the latter part of January and the fore part of February and as a consequence there was a restoration of more natural conditions with sales of good hay averaging somewhat higher. While the activity was more confined to the top grades and especially tagged bales the heavy supply of cheap hay, which had been urged upon receivers was also fairly disposed of, though mostly at unsatisfactory prices. Low grades of Clover and heavy mixtures particularly were weak and necessitated liberal discounting to effect sales, but Timothy and Light Mixed when of good quality readily brought a premium. The shipping trade was considerably better and local demand more active for good hay. The country movement is falling off which is also having a steadying influence on the market.

The oats market was easier in tone and lower for ordinary feeding quality, but an urgent demand prevailed for heavy weight white suitable for seed for which the premium was extended.

John E. Collins, Jr., now connected with Dorn B. Granger & Co., is devoting all his time in Canada and northern Michigan looking after hay shipments for the firm. Dorn B. Granger & Co. is a subsidiary of Dan B. Granger & Co., which was organized to handle the Canadian hay business of the company exclusively. Mr. Collins came with the Dan B. Granger from the Collins & Co., grain dealers, several years ago.

Harry E. Niemeyer, general manager of the Convention Committee of the Cincinnati Grain and Hay Exchange, having in charge the annual meeting of the Grain Dealers National Association to be held in this city next September, has called a meeting for March 20 of the various chairmen to arrange details pertaining to the work of launching the convention.

McQuillan & Co. will shortly move its offices from the Miller Building, opposite the Cincinnati Grain and Hay Exchange to the new Frederick A. Schmidt Company's building at Fifth and Main streets.

H. Lee Early of the Early & Daniel Company, who underwent several serious operations at the Johns Hopkins Hospital, Baltimore, where he was confined for nearly 10 weeks, received abundant proof of the affection and esteem in which he is held by the Cincinnati trade when he visited the Cincinnati Grain and Hay Exchange last month, where an informal reception was held for him with heartfelt congratulations from the members upon his full recovery and restoration to good health.

General Michael Ryan, president of the Cincinnati Abattoir Company and prominent in industrial, political and civic movements for many years died at his home in Walnut Hills last month. General Ryan was 78 years old and had been in ill health for months.

"Jack" Dorsel, assistant manager of the Dorsel Grain Company, has returned to his desk following an absence of several weeks, as the result of an attack of tonsillitis.

KANSAS CITY

B. S. BROWN CORRESPONDENT

KANSAS CITY elevators recently have been operating their corn drying facilities 16 hours a day, due to the fact that the movement to this market has been larger than the average and the grain has been unusually high in moisture content and acidity. Moisture generally has ranged from 16½ to 19 per cent, which suggests that liberal amounts may be hard to handle later in the season. Ordinarily the condition is good until the middle of March. Considerable corn that has been shipped from Nebraska points by way of Superior to Salina, Kan., and to Texas has suffered heavy loss in transit on account of the excess moisture. Operators say that more difficulty than usual is encountered in kiln drying.

Another feature in the situation has been the fact that industries have been good buyers of No. 4 corn and have kept the price of this grade relatively high, generally only about 1 cent under No. 3. This has tended to discourage elevator operators from buying the lower grades for the purpose of reducing moisture and raising the grade. Ordinarily a discount of about 4 cents is necessary to make operations of this kind attractive.

President Allen Logan of the Kansas City Board of Trade recently attended a conference of the Federal crop reporting organization in Washington, called by

Secretary Wallace to suggest improvements in the service. Mr. Logan perhaps is the best known grain statistician at Kansas City. A total of 22 representatives of various branches of the trade were present. An increased appropriation for the Department was urged. Other suggestions included: Simplify questionnaires so that growers can estimate their probable production in terms of bushels instead of percentage as compared with the previous year; extend the news service by leased wire and radio; continue the reports on the intentions of farmers to plant; prompt reports on exports of wheat; semi-monthly reports for two months prior to harvest; eliminate revisions of areas in December; accurate per capita consumption figures.

Fred C. Davis, vice-president of the Ernst-Davis Commission Company, has been elected a member of the Kansas City Board of Trade, on transfer from Arthur Freeman, deceased.

The Kansas City plant of the Corn Products Refining Company has been operating at 80 to 85 per cent of capacity recently, using around 15,000 to 20,000 bushels of corn daily, running seven days a week. Bulk of stocks thus far have been No. 4 Mixed. The principal product is syrup, in addition to which the plant is turning out substantial amounts of glucose for export.

W. M. Giles, Kansas City manager of Thomson & McKinnon, fell in his home the night of February 19 and fractured his skull. He died the following day without regaining consciousness. E. W. McClintic, formerly assistant manager, has been named manager of the Kansas City office.

C. L. Fontaine, Jr., of the General Commission Company has been elected to membership in the Kansas City Board of Trade on transfer from Frank Everts, who has retired on account of his health.

Reorganization of the Nelson Grain & Milling Company was announced recently. Wyman Nelson, organizer of the firm and former member of the Kansas City Board of Trade, has bought the interests of J. W. Boyd and Preston Pate of the Boyd-Pate Grain & Milling Company of Joplin, to whom he sold the controlling interest several years ago. S. T. Wildbahn, formerly general manager of the Excelsior Feed Milling Company of St. Joseph, Mo., has severed his connections with this firm and will become treasurer and general manager of the Nelson Company. E. L. Barr, who has been secretary of the company, has been named vice-president, and R. N. Barnard will become secretary. A president has not been named yet. Mr. Nelson will not be active in the management of the company. The company manufactures meal, chops and feeds.

J. A. Theis of the Simonds-Shields-Lonsdale Grain Company has gone to southern California where he expects to remain several months for his health.

G. A. Johnson of the Armour Grain Company has been elected a member of the Kansas City Board of Trade on transfer from David Keenan, formerly of the Kansas City office and now in business for himself at Wichita. Mr. Johnson, who is 22 years old, is the youngest member of the exchange.

F. H. Udell, assistant secretary of the Ralston-Purina Company, has been elected a member of the Kansas City Board of Trade on transfer from Joseph Whyte.

W. H. Frazell, Jr., assistant secretary of the Kansas City Board of Trade, left recently for a prolonged vacation. His health has been bad for some time.

George K. Walton, former member of the Kansas City Board of Trade, died at his home here February 26, after an illness of three weeks. He was associated with Goffe & Carkener for 10 years, leaving the firm in 1920 to go with the Nelson Grain & Milling Company, which he left later to enter the construction business.

J. B. Mitchell of the Morrison Grain Company is an applicant for membership in the Kansas City Board of Trade on transfer from L. W. Sanford of the Mid-Continent Grain Company. The consideration was \$5,500, including the transfer fee of \$500.

Charles W. Lonsdale, president of the Simonds-Shields-Lonsdale Grain Company, returned March 1 from a three months' trip in Europe, his second in the past year. He brought back a rather pessimistic opinion of conditions there. With money values falling and food prices rising, he viewed with alarm the general conditions. The only pleasant things he found in the trip, Mr. Lonsdale said, were the luxuriant crops in France and Italy and the faith the Europeans have in the reparations conference.

The Kansas City Grain Club at its annual dinner March 3, elected the following officers for the coming year: B. C. Christopher, Jr., president; Harry C. Gamage, vice-president; W. W. Fuller, secretary and treasurer. The Executive Committee is composed of N. S. Noland, Stephen H. Miller, Frank Theis, Roy

Swenson, and J. J. Kraettli. A resolution was adopted asking the directors of the Kansas City Board of Trade to appoint a committee to go to Washington to oppose the McNary-Haugen Bill.

Wheat receipts at Kansas City in February were 3,096 cars, about 40 per cent more than in January and a slight increase over a year ago and the 10-year February average. Corn arrivals, 2,820 cars, were the largest ever reported in that month, with the exception of 1918 when the total was 4,494 cars. Compared with the 10-year average there was an increase of 39 per cent. Oats receipts, 567 cars, showed a moderate increase over January and a year ago.

"Unless export values rise to the Kansas City basis," said a local elevator operator recently, "we will have 5,000,000 or 6,000,000 bushels of wheat left in stock here by May 1. 'If mill demand should happen to lag the total might be as high as 7,000,000 bushels.' Kansas City stocks the first of the month were close to 12,000,000 bushels, or less than 1,500,000 bushels under the high level of the season reached the last of December. A large proportion is No. 3 and lower.

TOLEDO

S. M. BENDER CORRESPONDENT

TOLEDO has been having a regular after harvest movement of wheat and coarse grains. Demand has continued fairly well in spite of the liberal receipts. Buyers are pretty well loaded up but have paid as high if not higher than other markets right along. When farmers get busy with spring work no doubt offerings will become smaller. Flour trade has been dull all month and the same can be said of feed. Special brands of feed have enjoyed a rather active trade but not as much as dealers would like to see. Raising of the tariff may have a good effect on prices for the coming year but have been discounted on this crop. Domestic milling demand is just fair and Soft wheat premiums easier.

Grain receipts for the last month were: 475 cars of wheat, 607 cars of corn, 180 cars of oats, 10 cars of rye and 5 cars of barley. Total 1277 cars.

Receipts for the year 1923 were: 5,637 cars wheat, 2,742 cars corn, 1,666 cars oats, 119 cars rye and 44 cars barley. Total 10,206 cars. Wheat by lake: Manitoba 3,893,600 bushels, Northern Spring 983,750 bushels, Canadian Spring 488,000 bushels.

Among the callers during the month on the Exchange floor were: O. H. Pool, Waynesfield, Ohio; J. T. Badgley, Pioneer, Ohio; Jake and Gus Fetter of Kendallville, Ind.; R. N. Malay, Ann Arbor, Mich.; Calvin Amstutz, Pandora, Ohio; F. A. Courteen, Milwaukee, Wis.; C. L. Rice, Metamora, Ohio; George Storch, Napoleon, Ohio; A. Bather, Minneapolis, Minn.; L. C. Chase, Grafton, Ohio; H. F. Oestrich, Rocky Ridge, Ohio; E. C. Bennington, Milwaukee, Wis.; and M. L. Rice of St. Mary's, Ont.

Toledo cash grain and seed prices are now being broadcasted by radio at 3:30 p. m. daily from the Detroit News station WWJ, at Detroit, Mich.

The firm of Yager & Rupp at West Unity, Ohio, has been dissolved. Marcus Yager has bought out the interest of Jesse Rupp and will continue the business at the above station.

The New Waverly Elevator Company have rebuilt their elevator which burned last October. The same people that were interested will run the new elevator.

New members of the Exchange during the past month are: Edgar Theirwechter of The Emery Theirwechter Company, Oak Harbor, Ohio; E. N. Rosenbaum of The Rosenbaum Grain Corporation, Chicago.

F. O. Paddock, Paddock-Hodge Company, Charles Mollett, Lake Erie Milling Company, and Charles Keilholz of Southworth & Co., were witnesses for the grain men, at a hearing of the Wabash-Virginia Cities rate case, before Commissioner Butler of the I. C. C. in Toledo on February 26.

John Tanton in the seed business at London, Ont., and Paul Hoffman, Buenos Aires, Argentina, were calling on Toledo seedsmen during the month with a view to increasing present business relations.

Aaron Sapiro, a recognized leader of the co-operative movement in the State of California was heard in Toledo last month. His address consisted principally of a review covering the work already accomplished in marketing eggs, prunes, raisins, walnuts and tobacco. Very little was said concerning the proper method of disposing of grains although he is supposed to have solved this problem. Many grain men

are at a loss to understand how the farmer is hoodwinked by these self-styled leaders but after hearing his oratory it becomes a simple matter. They are probably hypnotized.

A receiver has been named for the Mt. Cory Farmers Elevator Company upon petition to the Common Pleas Court by the Mt. Cory Farmers Bank. Assets are listed at \$21,598 and liabilities amount to \$28,744.

Farmers in Union County, Ohio, say that crops don't begin to pay the cost of the labor they must hire to get them harvested. They cannot pay the wages asked and as a result farm hands are going to the cities to seek employment.

Amos Bigelow has resigned as manager of the Leipsic Grain Company branch at Muntanna, Ohio. He was formerly manager of the Muntanna Equity Exchange at that place.

Alphonse Mennel, senior member of the Mennel Milling Company, was 75 years old on February 27. Congratulations of the Toledo Produce Exchange and Ohio State Millers in session at Columbus, Ohio, were wired to him. His reply to John C. Husted, vice-president of the Exchange, was that he prized most highly the friendship and esteem of the members who so thoughtfully remembered him.

Charles Kieser of the Kasco Mills is spending a few weeks in the Mecca of Millers at Palm Beach, Fla. He is an ardent devotee of the putting green and fairway and has been known to break course records when no one was looking.

C. J. Murphy has joined the branch office of J. S. Bache & Co. located here and will specialize in selling high grade stocks and bonds. A. J. Burkhart is manager and Carl A. Goodman assistant.

David Anderson of the National Milling Company and long famous among millers and members of the Castalia Trout Club as an expert fisherman is reported to have given up the hook and line in Florida this winter. It is said he sang the Toledo and Ohio songs so much the fish gave him the air and he has turned to golf for consolation.

Kent Kellholtz of Southworth & Co. gets the office force of that firm together once a month for a feed and chat to put more worth in Southworth service. They have found it an excellent way to improve office morale and efficiency.

Those who have heard the fife and drum corps of the Exchange, composed of Fred Jaeger, Ben Hofner and George Kregagh, say their rendition is so realistic that one looks around expecting to see some old soldiers coming. We happen to know they are old soldiers in the grain business so that part is all right too.

One of the largest cars of wheat ever handled in this market was shipped to Southworth & Co. recently by the Pandora Milling Company, Pandora, Ohio. It contained 121,120 pounds or 2,018 bushels 40 pounds in a 110,000-pound capacity car.

John C. Husted of The C. A. King & Co. has learned well the old adage about playing with fire. He had a box of "safety" matches ignite in his pocket the other day and in trying to save himself from further embarrassment cooked his fingers in fine style. A fire hose has been installed on the Exchange floor to prevent any more accidents of this nature.

The Toledo Chamber of Commerce has established a branch office of the Bureau of Foreign and Domestic Commerce in this city. The selection of Toledo was the result of negotiations between officials here and those of the Department of Commerce in Washington. Leonard J. Gans is in charge of the local office. It is thought it will be a valuable aid to grain and seedsmen doing business abroad.

At a meeting of the Chicago Board of Trade Legislative Committee held in Chicago last Monday this Exchange was represented by J. C. Husted of the C. A. King & Co.

The flood menace stage of the Maumee River which threatened Toledo for several days has decreased to a more moderate size. Some old timers recall the days when bridges and all were swept before the power of ice and current.

The meeting of the Ohio Farmers Grain Dealers Association, held in Toledo last month was a great success. Many interesting speakers were heard. Among them were Charles Adkins, Rush Croninger, E. G. McCullough, and H. C. Ramsower. An excellent banquet was tendered visiting delegates by members of the Exchange who had local talent furnish an evening of amusement such as few who attended will ever forget. No speeches were allowed at this affair and those who were called on took the opportunity to tell the latest story they had heard. About 155 managers from stations throughout Ohio were at the

two day session. The consensus of opinion at the convention was that the present marketing machinery should not be destroyed to make way for something untried. It was pointed out that all the grain trade had suffered along with the farmer and very few cash grain companies had made money during the past year.

J. F. Hall, former manager of the Weber Flour Mills Toledo office and now located in Pittsburgh for the Aunt Jemima Flour Mills, is reported to be very fond of Toledo grain men and their brand of hospitality and it wouldn't surprise us if Jim came back to this thriving lake port again.

Rains and thawing weather have made dirt roads impassable between some of the nearby towns. Many farmers are isolated as a result while others have reverted to the horse and buggy as a means of transportation. It is problematical where a horse could be tied in Toledo unless it would be to some of the numerous "No Parking" signs. Hitching posts are almost a thing of the past.

Out of every thousand men, women and children in Toledo 11.5 men belong to the Chamber of Commerce according to a late survey. Toledo leads Ohio in per capita membership and only six large cities throughout the country have a larger rate. Members now total over 3,000 in this progressive civic body.

Two grain elevators in Dark County near Minster, Ohio, have recently been sold at public sale and two more are to be offered at public auction in the near future.

The old B. & O. Railroad Elevator at Sandusky, Ohio, is being razed and this marks the passing of this point as an important receiving and shipping center of grain. In the old days thousands of bushels annually passed through the elevator for shipment to eastern points.

Edgar Thierwechter, prominent miller of Oak Harbor, Ohio, and member of the Toledo Exchange, has been elected vice-president of the Oak Harbor Business Men's Association.

The 150-barrel mill and elevator at Clyde, Ohio, has been purchased by Charles Franke, a former resident of Fostoria, Ohio, now living in Toledo. He is organizing a company and will continue to reside in Toledo taking an active part in the management of the company.

Roy Eller of Grover Hill, Ohio, suffered severe bodily injuries when he became entangled in a revolving shaft at the elevator. He was hurled around several times and the clothing torn from his body. Reports from there say he will recover.

The Tiffin Farmers Exchange Company at Tiffin, Ohio, declared a 4 per cent dividend of the 11 per cent earned during 1923. At the annual meeting of the company 200 of the 245 stockholders attended and received a dollar bonus for coming.

John H. Taylor, treasurer of the Northwestern Elevator & Mill Company, has returned from a vacation of several weeks in the South.

The Oppen-Orebaugh Milling Company of Norwalk, Ohio, has purchased the mill at Bellevue, Ohio, formerly operated by the Bellevue Flour Mills. It will be used for the manufacture of feeds entirely.

The Grafton Flour Milling & Grain Elevator Company of Grafton, Ohio, has purchased the feed mill at Shelby, Ohio. This mill has never been operated before and will be known as the United Mills Company. They will be ready for business the latter part of the summer.

Cash and future seeds in Toledo have ruled firm during the past week. Liquidation during the latter part of February carries prices down to \$11.25 from which level they rallied sharply. Dealers report an improvement in the cash demand and are looking for increased sales as soon as spring weather appears. Domestic seed continues to command a big premium over the foreign and buyers are willing to pay for the real article. The quality of the overseas product is unquestionable as to purity and germination. However some buyers are afraid of it because of the possibility of farmers turning it down. October Clover has been active for some of the trade see the likelihood of another short crop because of reduced acreage. The new crop appears to have stood the winter in good shape. There is a long road to go before the seed crop is ready for market and October offers opportunities for quick investment returns. Hence the interest already beginning to show. Around present levels it is believed farmers will be willing buyers.

Receipts of Clover during the month of February, 7286 bags. Alsike 466 bags. Timothy 880 bags. Shipments, 6122 bags of Clover, 1373 bags of Alsike, and 898 bags of Timothy.

ST. LOUIS

W. F. WALTER CORRESPONDENT

A REVIEW of the wheat market during the past month has reflected anything but a satisfactory state of affairs. Primary receipts were far less than last year and demand was very light, with mills only taking to cover actual sales of flour, which was also very light. Buyers of wheat and wheat products have permitted their stocks to diminish and not having faith in present values, are buying only as necessity demands. Pending disruptive legislation at Washington and the Governmental attitude as concerns grain, is a great hamper and the trade feels the resulting effect extremely. Wheat quotations during the period were fairly steady with only slight variations occurring.

Corn receipts were fairly heavy, greater than the demand, which has resulted in crowded elevators though late reports have it that a decided falling off in receipts was noted. Export demand was dull, in fact local houses were asked to delay shipments on old contracts by seaport dealers because of necessitating restorage at crowded ports. It was also noted that cash corn set a new discount record during the period under the May option.

Oats were in a better position a fair demand prevailed which absorbed all offerings.

E. A. Wilderman, who left Belleville, Ill., to settle in Blackie, Alberta, some 18 years ago, recently visited on the Exchange to greet his old time friends. He stated that on the last crop he had 3,000 acres of land in wheat which netted an average of 42 bushels to the acre and which was excellent quality for which he received 90 cents per bushel f.o.b. his track. Sale was made to England and shipment was made via Vancouver and Panama Canal.

A meeting was held at Waterloo, Ill., on February 26, 1924, by millers, farmers and Governmental representatives, for the purpose of solving the problem of eliminating onions from the wheat. This has proved a serious problem in the immediate sector around Waterloo.

Chas. B. Dreyer, treasurer of Dreyer Commission Company of St. Louis, underwent a slight operation last month in a local hospital, from which he has fully recuperated.

Wm. Gotthof, grain and flour broker of Louisville, Ky., was in St. Louis on business recently.

L. Kosmach of Kosmach Stewart Company, Ltd., Belfast, Ireland, importers of grains, flour and feed, was recently a visitor in St. Louis.

The Cereal By Products Company, with headquarters in St. Louis and branches in Chicago and Memphis, announce the opening of a new branch office in Buffalo, N. Y. F. C. Greutker, who was formerly connected with Clover Leaf Milling Company, at Buffalo, N. Y., has been appointed manager.

A cargo of 10,200 tons of grain left Cairo, Ill. via Federal Barge Line the week of March 8 for New Orleans for export. This is the largest tow in the history of the Federal Barge Line service. Most of the grain was shipped to Cairo by rail from St. Louis during the winter as navigation on the Mississippi was discontinued above Cairo December 1 and will remain closed until the ice flow ceases to be a hazard.

At a meeting recently held by the stockholders of the Ballard-Messmore Grain Company, John Ballard was elected president, to succeed the late John H. Messmore; Sylvester Fisher, who has been with the firm since the war, was elected vice-president, and Harry Boudreau was re-elected secretary and treasurer.

Announcement has been made that the headquarters of the Missouri Grain Dealers Association, of which D. L. Boyer is secretary, has been moved to 204 Merchants Exchange, St. Louis, Mo.

Richard F. Kleimeier of Seele Brothers Grain Company, of this city is an applicant for Merchants' Exchange membership, having surrendered certificate of Henry McKee.

B. E. Martin, of Martin & Co., grain and feed dealers at Salem, Ill., was in St. Louis on business last month.

The following were visitors on the Exchange during the past week: C. A. Hiebert, president of the Wall-Rogalsky Milling Company, McPherson, Kan.; W. W. Pollock, of Wm. Pollock Milling & Elevator Company, Mexico, Mo.; W. J. Reichert, of Reichert Manufacturing Company, Freeburg, Ill.; A. L.

Jacobson of Arkansas City Manufacturing Company, Arkansas City, Kan.; Chas. Quinn, secretary of the Grain Dealers National Association, Toledo, Ohio; M. B. McNair of Lyons Milling Company, Lyons, Kan.; Philip Waldman, of Ismert Hincke Milling Company, Kansas City, Mo.; C. B. Stout, of Dixie Portland Flour Company, Memphis, Tenn.

H. E. Halliday, Jr., a prominent grain broker in this market, died from pneumonia on February 18, 1924 at the family home, Cairo, Ill., at the age of 27 years. He was a son of H. E. Halliday of Cairo, who is a large grain and elevator operator in that city.

Paul A. Hoffman, of Buenos Aires, Argentine, was a visitor on the Exchange recently.

W. L. Johnston of Marshall Hall Grain Company, of St. Louis, recently visited Memphis, Tenn., on business.

The organizers of the Great Eastern Elevator Corporation have applied for incorporation papers at Jefferson City, Mo. The capital stock is to be \$10,000 and R. H. Adams has been elected president of the organization.

Felix, son of Eugene C. Dreyer of Dreyer Commission Company of St. Louis, was married on February 21, 1924, to Miss Frimath Mathes.

George A. Powell of Powell & O'Rourke Grain Company of this city was in New Orleans on business last month.

T. P. Snowden of the firm of Scott & Snowden, grain, flour and feed brokers at Meridian, Miss., was in St. Louis on business recently.

W. K. Woods, vice-president of Ralston Purina Company, feed manufacturers in this city, recently returned from Florida where he had spent a pleasant vacation.

Eugene C. Dreyer, president of the Dreyer Commission Company of this city, is spending a vacation at Belmar, Miss.

P. S. Wilson, secretary of Valier & Spies Milling Company of this city, returned recently from a business trip to the South and reports that business conditions as related to flour look very favorable.

E. L. Stancliffe, manager of the Geo. P. Plant Milling Company of this city, is an applicant for Merchants Exchange membership, having surrendered certificate of J. J. P. Langton.

H. E. Kelly and H. P. Bell, of Model Flour Mills, Greeley, Colo., were visitors on the Exchange last month.

GRAIN NEWS FROM BOSTON

BY L. C. BREED

Henry E. Taylor, one of the well-known members of the Chamber, accompanied by Mrs. Taylor, left Boston early in last month for a 10 weeks vacation in Florida. As Mr. Taylor has acquired a reputation as a fisherman, it is expected that some wonderful tales will be handed out on his return home.

Forrest S. Smith, of Hosmer, Robinson & Co., leading hay receivers of the Chamber, also departed last month for Florida.

The members of the Grain Board were gratified to learn that the Chicago Board of Trade voted against the extension of the time for trading.

At the recent hearing at Washington by the Tariff Commission on wheat and flour costs, C. M. Cox, representing the Grain Board, told the members of the Commission that an advance on wheat might adversely affect New England farmers if the duty on bran and wheat feedstuffs were increased in a corresponding ratio. He also stated that the Boston trade desired that the Commission, however, should consider a corresponding increase in the rate on flour, if the wheat duty was increased.

Medium and low grade hay is in over-supply with some pressure to sell in order to move cars and avoid storing; extreme top grades scarce and quiet. Rye straw is dull and barley steady; oats and wheat straw in light supply and quiet.

The Grain Board recently held a meeting to consider what is known as The Johnson Bill H. R. 742, and voted to oppose it. This bill was offered by Representative Albert Johnson of Washington, and proposes to have it required that the manufacturer place his name on the label of all food products. It was pointed out, if this bill was passed, the flour millers would be seriously affected. While millers now quite generally place their names and location on packages sold under the mill brand, a large quantity

of flour, particularly in case of chain-stores, is sold by the mills to be shipped under the buyer's brand.

The Boston Retail Grocers' Association has appointed the committees who are to take charge of the members exhibits at the Boston Food Fair to be held in the spring.

Harry Hamilton, chairman of the Executive Committee of the Grain Board, has long been connected with the grain and hay trade of Boston, having entered the employ of the old firm of Lord & Webster in 1873. Both of the members of the firm have been dead several years, and Mr. Hamilton now is the head of this house, and in business hours can be found at the old stand on Commercial street where in 1846, the house was established. It is only within comparatively recent years that hay was added to the grain business. There has been a steady and large development of this branch, so that now hay is shipped to many New England points and sometimes down the coast as far as Florida.

Some of the feed men of Boston attended the mid-winter session of the Eastern Federation of Feed Merchants, recently held at Binghamton, N. Y. The problem of distribution of feedstuffs was the principal topic discussed.

Coarse grains rule irregular and weakness continues as the feature of the local market for mill feed. Demand is slow, owing in part to the open winter, but as it is a long time before pastures will be available there is likely to be a fair inquiry right along.

Among the visitors to the Chamber during the month of February were the following: Jay Chapin, Chicago, Ill.; E. V. Bent, Landis, Sask.; E. J. Grimes, Minneapolis, Minn.; R. N. Hoople, Minneapolis, Minn.; Ralph Nichols, London, England; D. A. Williams, Kent, Ohio; Martin Luther, Minneapolis, Minn.; C. E. Huntington, Winnipeg, Man.; H. Zinner, New York City; H. S. Klein, Chicago, Ill.; M. P. Fuller, Naseca, Minn.; M. F. McCarthy, Minneapolis, Minn.

Receipts of grain here for the month of February were as follows: wheat, 137,486 bushels; corn, 9,550 bushels; oats, 152,730 bushels; rye, 1,500 bushels; barley, 750 bushels; malt, 5,625 bushels; mill feed, 473 tons; cornmeal, 1,260 barrels; oatmeal, 270 cases.

NEWS FROM NORTHERN OHIO

BY T. J. CUNNINGHAM

The B. & O. Elevator in East Sandusky is being razed. A force of workmen started on the job February 29. The razing of the elevator will also mark the passing of Sandusky as a grain receiving and shipping point. In the old days hundreds of tons of wheat and corn were received by boat annually to be shipped by rail to seaboard. The property was bought by the Kelley's Island Lime & Transport Company.

Charles Franke, former Fostorian now living in Toledo, has bought an elevator and 150-barrel flour mill at Clyde, Ohio. He is organizing a company, and although he will be active in the management of the mill, he will continue to live in Toledo.

Louis Schmehl, 50 years old, vice-president of the Jenera Co-operative Grain & Supply Company, Jenera, Ohio, is dead.

An elevator company, owning four elevators, was recently placed in the hands of receivers. Local groups at Arcanum and Pittsburg in Darke County purchased the properties at these points at receivers' sale, and are taking steps toward the organization of a co-operative plant at each point.

Clyde Gormley, manager of the Berkey Elevator Company, Berkey, Ohio, slipped on the icy walk recently and cut a gash in his head requiring a number of stitches to close.

A new motor feed grinder has been added to the equipment of the Arcadia Elevator Company, Arcadia, Ohio.

Between 25 and 30 bushels of Red Clover seed were stolen recently from the Rawson Co-operative Grain & Supply Company, Rawson, Ohio.

Arthur A. Cunningham, of the Sneath-Cunningham Company, has been re-elected president of the Tiffin Consolidated Telephone Company.

Farmers in the vicinity of Mandale are marketing large quantities of corn.

E. G. McCollum, secretary of the Indiana Farmers Grain Dealers Association, was the keynote speaker at the ninth annual convention of the Ohio Farmers Grain Dealers Association held in Toledo, February 21-22. His message was delivered from a practical standpoint. He insisted that the farming industry as

a whole, and the grain business as a portion of the whole, will never make big strides until there is a fair and more equitable division of labor and activities. He sounded an appeal for freeminded labor, a new type of leaders, concerted action in the different phases of activity, and asserted that the "pooler" is destroying instead of building.

A 4 per cent dividend was declared February 19, by the Tiffin Farmers' Exchange Company. The net gain on the investment during the past year was 11.2 per cent. By consent of the stockholders it was decided to pay a dividend of 4 per cent and place the remainder in the company.

Congressman James T. Begg, in an address delivered before the Farmers' Institute at Fostoria, February 21, declared that in an age of organization there was only one move for the farmers to make, and that was to "organize and co-operate" with a view to restricted production and marketing. "This co-operation must be carried to the ultimate consumer if it is to be successful," he said, "and that includes all phases of marketing, the warehouse, wholesale, retail and manufacturing. We cannot by legislation put value into a bushel of wheat. Price fixing is an economic fallacy and not once has the Government attempted such legislation but what prices became confusing. In every case, the people for whom Congress legislated were worse off than they would have been if no legislation had been passed."

Edwin G. Craun, superintendent of the Sneath-Cunningham Company, was elected president of the Tiffin Sinking Fund Commission at its organization.

Frank Wagner, expert of the Ohio Gas Engine Company, Sandusky, recently spent a couple weeks overhauling Ohio engines at the various Sneath-Cunningham Company Elevators.

The Pemberville Elevator Company, Pemberville, Ohio, has the following officers elected: President, Paul Bruning; vice-president, William Dameu; secretary-treasurer, Fred Peters.

Seed corn in Seneca County is on a par with the average seed corn in Ohio this year. This is the opinion of J. S. Cutter, state specialist, who has been conducting a series of corn culling demonstrations here this week. "Farmers who stored their seed corn in a house heated artificially early last fall have good seed corn as a rule," Mr. Cutter says. "The average corn now taken from the crib is unsafe to plant. There is enough seed corn in the county to supply our needs but it should be procured and tested soon."

A good covering of snow is on the wheat at this writing (March 10) so that it is amply protected against the cold weather which is predicted for to-night and to-morrow. Preceding this, the ground had been quite soft from copious rains which were later followed by freezing weather. It is not thought, however, that the wheat has been injured, so far. There is no evidence of it having "lifted" anywhere, and while the plant is pretty brown, believe the roots are still healthy. Farmers, generally, say it has been a good winter for wheat. The critical time is now here, however, when most anything may be looked for. Farmers have been free sellers of wheat during the past month, and a lot of wheat stored in country elevators has been settled for.

There is still a lot of corn in the fields to be husked, and farmers are now seizing every opportunity to get it out. There is quite a general movement of this commodity at present. It is rather surprising to find that corn which has been well shocked in the fields during the winter is coming out in better shape than some of the corn which was cribbed early. All of the corn, however, is more or less "chaffy," and, in a general way, it cannot be called a good crop as far as quality goes. It is difficult to furnish cars in the ear, as most of the corn is shredded, and therefore cannot be sorted. The moisture content of the shelled corn runs from 18 to 22 per cent.

Movement of oats continues very light, and farmers who have any are still looking for higher prices. Marion County, which ordinarily produces a big crop of oats, has failed in this respect for the last two seasons. Their oats have been very light in weight, as well as quantity, and unless the farmers change their seed, the same thing is liable to be repeated again this year.

Quite a few bunches of Clover seed, especially Mammoth, which farmers have held back, is now coming out of retirement, but meeting with a very poor market. Timothy seed is just about all cleaned up here.

Charges of burglarizing five grain elevators in three counties, face seven young men held in the county jail at Findlay. They were arrested March 8 by Sheriff Frank E. Hoy and Deputy Kenneth Clark. The prisoners are suspects in the thefts of Clover seed valued at \$1,350 taken from elevators in Rawson, Mt. Blanchard and Vanlue in Hancock County.

March 15, 1924

Beaver Dam in Allen County and Hoytville in Wood County. Efforts to sell the seed to the United States Commission Company, Upper Sandusky, aroused the suspicions of the management and the arrests followed.

H. W. Tomb, who has been secretary of the Seneca County Farm Bureau since its organization in 1918,

has resigned. The vacancy will be filled by the county board at its quarterly meeting which will be held April 5.

According to A. E. Anderson of the Farm Bureau Federation, there is a possibility of the formation of a wheat pool among Ohio farmers to market their 1924 crop.

ASSOCIATIONS

CONVENTION CALENDAR

March 19-21. Farmers Grain Dealers Association of North Dakota, Fargo.

April 1-4. Mill and Elevator Fieldmen's Association, Hotel Sherman, Chicago.

April 17-18. Western Grain Dealers Association, Cedar Rapids, Iowa.

May 9-10. Illinois Grain Dealers Association, Leland Hotel, Springfield.

May 14-16. Kansas Grain Dealers Association, Coates House, Kansas City, Mo.

June 16-17. Wholesale Grass Seed Dealers Association, Drake Hotel, Chicago.

June 18-20. American Seed Trade Association, Drake Hotel, Chicago.

July 1-3. National Hay Association, Cedar Point, Ohio.

September 22-24. Grain Dealers National Association, Hotel Gibson, Cincinnati, Ohio.

KANSAS MEETING ANNOUNCED

Secretary E. J. Smiley of the Kansas Grain Dealers Association, announces that the twenty-seventh annual meeting of that organization will be held at the Coates House, Kansas City, on May 14, 15 and 16. The program of the meeting has not yet been made up, but will be announced later.

ILLINOIS DEALERS SET DATE

Secretary W. E. Culbertson of the Illinois Grain Dealers Association recently made the following announcement:

"The Board of Directors have selected Springfield for our next convention and fixed the date as Friday and Saturday, May 9 and 10. Headquarters will be at the Leland Hotel. Our meeting will be prior to the after planting movement of grain, and it is hoped that you will arrange to be in attendance, as we are going to make this the best meeting in the history of our organization."

ASSOCIATION OFFICERS IN MISSOURI

Last month we gave a full report of the meeting of the Missouri Grain Dealers Association, but the election of officers was held too late to be included. The officers are: President, Ed. S. Harte, Boonville; vice-president, A. C. Harter, Sedalia; treasurer, W. W. Pollock, Mexico; secretary, D. L. Boyer, St. Louis. Directors: D. B. Kevil, Sikeston; J. M. Richards, Hannibal; George Wolff, Jr., New Haven; P. C. Pate, Joplin; D. J. Rootes, Tebbetts; A. H. Meinershagen, Higginsville; A. E. Klingenberg, Truesdale; H. H. Green, Pattonsburg; A. G. Sullivan, Nevada; W. T. Lingle, Bethany.

MISSOURI CHANGES HEADQUARTERS

Secretary D. L. Boyer of the Missouri Grain Dealers Association announces that the headquarters of the organization were moved on March 1, from Mexico, Mo., to 204 Merchants Exchange Building, St. Louis. This is a wise move for it will enable the secretary to keep in more direct touch with traffic and other matters which originate in St. Louis, and will probably save considerable expense in the attendance at hearings and conferences. The Association office has been at Mexico for many years and we have no doubt the town will miss it.

Mr. Boyer also announces that the Association has employed the services of the Western Traffic Association of Kansas City, to handle all claim matters of members.

OHIO CO-OPERATIVES MEET

The annual meeting of the Farmers Grain Dealers Association of Ohio was held in Toledo on February 21 and 22. President D. J. Lloyd of Waterville was re-elected; Eli Dickey of Jewell was named as first vice-president; Charles Krohn of Deshler, second vice-president. Directors: Henry Schnebele, Deshler; O. W. Cole, Janera; Roy G. Arndt, Shinrock, and L. I. Winch, McClure.

It was a good meeting, the high spots being the addresses of Charles Adkins of Illinois, who vigorously defended the present grain marketing system; E. G. McCollum, secretary of the Indiana Farmers Grain Dealers Association, who said that the farmers were over organized and that there was

too much overhead in the grain business, two or more elevators at a station where one would serve; and H. C. Ramsower of the state university.

The convention went on record in its resolutions as not being opposed to new untried methods of marketing, but urged exponents of all such panaceas to conduct their experiments in territory untouched by the farmers' elevator associations. The convention also formally expressed its feeling of loss in the death of Woodrow Wilson.

The Association was entertained at a banquet given by the Toledo Produce Exchange, President Jesse Hurlbut acting as toastmaster.

WESTERN DEALERS MEET IN APRIL

The annual convention of the Western Grain Dealers Association will be held at Cedar Rapids, Iowa, April 17 and 18. By that time the fate of the McNary-Haugen bill will be known; if it is defeated it will redouble the efforts of the voluntary poolers; if it passes, then you can depend upon it the grain trade will have reason to counsel together. In any event the meeting should be largely attended, for an excellent program is always provided by the Association and Cedar Rapids dealers are notorious for their hospitality. The full program of the meeting will be announced next month.

PLANS OF NATIONAL HAY ASSOCIATION

The National Hay Association will return this year to Cedar Point, Ohio, for the thirty-first annual meeting of the Association. President Dan Mullally and Secretary Taylor are already making plans, which are expected to culminate in one of the best meetings ever held by the organization. The date is set at July 1, 2 and 3, which will make a good opportunity for dealers to combine the convention with a vacation. No better place could be selected for either, particularly as hay dealers feel perfectly at home on the shore of Lake Erie.

Hay dealers everywhere will do well to keep this time open, for the meeting will be more than usually important as a thorough understanding of the course of action under the Federal grades will be discussed and settled.

TRI-STATE SHIPPERS MEET

The annual meeting of the Tri-state Country Grain Shippers Association was held at Minneapolis on February 21-23. President Nils R. Tacklind opened the meeting by calling upon Secretary E. H. Moreland for his report. After this was approved he gave his own address which was mainly a defense of the compulsory pooling plan as outlined in the McNary-Haugen bill.

Following this address a discussion ensued as to whether or not the Association should be continued. The discussion seemed to put new vigor into the meeting and also into the Association. It was decided to increase the dues to \$6 per year with \$1 additional for each extra elevator of the line companies; and to pay the secretary \$125 per year for his services.

The following resolution was adopted:

Be it resolved, That the Tri-State Country Grain Shippers Association now in session continues its confidence in the importance of individual efforts in all lines of business under our system of government and that its usefulness and efficiency in serving the public should not be unreasonably hampered by unsound and destructive class legislation and the misguided efforts to duplicate well established agencies which in the grain trade are recognized as adequate and efficient, have proven superior and which function at less cost to the producer than any other system yet devised in any country.

Be it further resolved, That we strongly commend the maintenance and justified increase in the tariff on cereals and seeds and other products to the end that our home producers shall have the first advantage of our own great home markets.

The election of officers resulted in the selection of F. E. Crandall, Mankato, Minn., as president; first vice-president, A. E. Betts, Mitchell, S. D.; second vice-president, Arthur Speltz, Albert Lea, Minn.; third vice-president, S. O. Tollefson. Directors: A. E. Anderson, Cottonwood, Minn.; N. R. Tacklind, Drayton, N. D.; E. H. Sexauer, Brookings, S. D.; B. P. St. John, Worthington, Minn.; R. E. Jones, Wabasha, Minn.; W. R. Richardson, Elgin, Minn.; August Evert, Kennedy, Minn.; T. F. Dahl, Minneota, Minn.; H. R. Wollin, Marshall,

Minn.; T. M. Comer, Rustad, Minn.; B. D. Cascomb, Grand Meadow, Minn.

Addresses were made by B. P. St. John, on "Good Seed Corn"; Richard Burns, on "Field Seeds in South Dakota"; F. E. Crandall on "Railroad Leases"; H. W. Speight on "Our Proposed Grain Storage Law"; and a paper was read by the secretary, by R. E. Jones, on "Handling and Grading Wool." The meeting adjourned in a far better spirit than it began and the Association is assured a long period of usefulness.

MINNESOTA DEALERS MEET

The three day session of the Minnesota Farmers Grain Dealers Association was held at Minneapolis beginning on February 19. President J. F. Gustafson of Windom kept the sessions going at a lively rate, and it was necessary as most of the addresses were limited to 10 minutes each on account of the great and varied number of subjects under discussion.

Among the speakers were Theo. Frederickson of Kerkhoven, H. J. Farmer of Airlie, S. S. Beach of Hutchinson, Fred Seidensticker of Wheaton, Charles Kenning of Bird Island, Lee Kuempel, E. C. Ford and F. B. Wells of Minneapolis, A. O. Lunder of Slayton, N. B. Leines of Willmar and Adam Boinn of Stewartville.

On Thursday evening a banquet was given by the Minneapolis Commission Merchants, and at the final session resolutions were adopted and officers were elected. Among the resolutions was one which provided as follows:

Our investigations have proved conclusively that pooling and other methods of marketing grain have resulted in increased handling expense, and have not maintained the high standard of efficiency that has already been established by the Farmers Co-operative Elevators, and therefore have secured for the producer a lower price than he could have received by marketing through the established co-operative elevators who sell their grain on a competitive market. It has been the policy of the Association to give all co-operative marketing plans a fair consideration and we are making the foregoing statement only after the most careful investigation of the results obtained.

The ballot for officers resulted in the re-election of J. F. Gustafson of Windom, president; and A. F. Nelson of Benson, secretary.

DEALERS MEET IN MICHIGAN

The midwinter meeting of the Michigan Hay and Grain Association was held at Flint on February 20, with an attendance of about 65 dealers. President L. M. Swift in his address reviewed conditions in the hay and grain trade and showed the depressing effect of continuous agitation in Washington.

Secretary T. J. Hubbard gave a picture of the financial side of the Association and showed that the budget called for funds which could only be supplied by a greatly augmented membership. He made a strong plea for co-operation of members in securing new names on the roll.

Mr. Sheffield of Battle Creek had for his subject, "Grain Markets from a Jobbers Viewpoint," in which he told of the troubles of the jobber and made suggestions which, if followed, would make it easier for both shipper and jobber.

A. J. Goulet of Midland, discussed the subject from the shippers standpoint, from which we take the following:

During the past five years the grain business of the country elevator operator in Michigan has undergone a number of changes, one of which results from the development of the dairy and poultry industries, which have materially increased the farm consumption of coarse grains that formerly found their way to the country elevator and produced some revenue for the shipper, but the revenue from dairy and poultry products are lost to the grain man and as dairy and poultry products increase from farm feeding, the grain shipping of elevators will proportionately decrease.

In some sections, plants that formerly shipped considerable grain, are fast becoming retail establishments, rather than carload grain shippers. These retail establishments are housed in rather costly plant investment and this gradual change from carload shipping to a retail business needs a very careful analysis of the gross profits to be added to cost of goods for correct selling prices. The very close margins of labor cannot be used as a basis for retail selling.

The country elevator enjoying a fair volume of retail trade can obtain logical information about safe merchandising margins from experienced and successful retail merchants of his community.

Operating Costs

I think it is a rather common practice among elevators to base retail selling prices not at a known or proper per cent of gross profits on sales, rather a fixed amount per hundred weight, which figured as per cent of gross profits on sales in many cases, would barely cover cost of doing business.

At the annual meeting last fall Mr. Diamond read a paper in which he covered the elevators per cent of cost of doing business and you will recall in his survey he found that in cases where a good volume of retail business was done, the average cost of doing business mounted to as high as 10 per cent, not on cost of goods but on gross sales, and that covered the entire business, both retail and shipping.

In these 10 per cent establishments several commodities must of necessity have been sold under average cost. Wheat, for instance, on a \$1 buying price should be sold at \$1.12 to realize a profit of 1 cent per bushel to the shipper over his average cost. Buying prices on wheat never permit of a 12 cent gross profit, which means that some other commodity must bear more than its share of average cost to equalize. This higher cost being directly attributed to retailing, because it requires more labor, accounting, and delivery costs in many cases, should then be subjected to a higher mark up than carload bulk sales.

The successful retailer knows his per cent of cost for doing business, to which he adds a net profit for

TRANSPORTATION

CONDITION OF CARS

Freight cars in need of repair on February 15 totaled 164,895, or 7.2 per cent of the ownership, according to reports filed by the railroads with the car service division of the American Railway Association. This was an increase of 3,326 over the number in need of repair on February 1, at which time there was 161,569 or 7.1 per cent. Of the total number on February 15, 118,888 or 5.2 per cent were in need of heavy repair, or increase of 3,057 over the number in need of such repair on February 1, while there were 46,007 or 2 per cent in need of light repair, an increase of 269 within the same period.

CAR LOADINGS

Loading of revenue freight continues to run well ahead of the corresponding periods in previous years, according to reports filed by the carriers with the car service division of the American Railway Association. Loading by districts the week ended February 23, and for the corresponding week of 1923 was as follows: Total, all roads: Grain and grain products, 44,226 and 40,344; live stock, 33,359 and 32,003; coal, 175,834 and 178,558; coke, 12,553 and 14,913; forest products, 77,164 and 69,762; ore, 8,514 and 9,597; merchandise, L. C. L., 213,073 and 201,726; miscellaneous, 281,175 and 283,284; total 1924, 845,898; 1923, 830,187; 1922, 728,926.

GRAIN RATES SUSPENDED

In I and S. No. 2047 the Commission has suspended from March 1 until June 29, schedules as published in Sup. No. 34 to Leland's I. C. C. No. 1537, and in Sup. No. 1 to Chicago, Milwaukee and St. Paul, I. C. C. No. B4667. The suspended schedules propose to revise the rates on grain and grain products from points in Illinois, Iowa, Minnesota, Missouri, Nebraska, South Dakota and Wisconsin to Texas, which result principally in increased rates. The following is illustrative:

| From | To Ft. Worth, Tex. | |
|-----------------------|--------------------|------------------|
| | Through rates | Reshipping rates |
| Minneapolis, Minn.... | 48½ | 46½ |
| Mason City, Ia..... | 48 | 46½ |
| Chicago, Ill. | 46½ | 44½ |

COTTONSEED MEAL AND HULLS

A finding of unreasonableness and an award of reparation have been advised by Examiner T. E. Pyne, in a report on No. 14833, Tallulah Cotton Oil Company (J. V. Wright, lessee) vs. Vicksburg, Shreveport & Pacific, as to rates and charges on mixed carloads of cottonseed meal and hulls, from Tallulah, La., to Vicksburg, Miss., shipped between August 10, 1922, and May 4, 1923. There was no carload rate on the mixed shipments. Varying rates were charged, in some the applicable L. C. L. rate of 30.5 cents on meal being charged. Pyne said that the general basis of charges on hulls was correct, but that on the meal the L. C. L. rates should have been charged in all instances, except where the application of the carload rate at the minimum weight of 40,000 would have resulted in lower charges. He said that many undercharges, and in one instance an overcharge, were outstanding. He said the Commission should hold the rates and charges unreasonable to the extent they exceeded those that would have accrued at a rate of 9 cents, 40,000 minimum. That is the rate now in effect, so the prayer for rates for the future was disregarded.

INDIANA RATES

In a mimeographed report on I. and S. Nos. 1946 and 2015, grain and grain products from Chicago, Peoria and St. Louis to Indiana, the Commission said the carriers had not justified increased and reduced reshipping rates on grain and grain products from Chicago and Peoria, other points in Illinois, and points in Wisconsin, to points in central and northern Indiana, reshipping rates on grain by-products from Peoria to such Indiana points, and local rates on grain by-products from Chicago, Peoria, and St. Louis to such Indiana points and required the cancellation of the 21 tariffs involved. Cancellation, for the time being, ends the effort of the carriers to equalize Fort Wayne and Indianapolis on grain and grain by-products. They are on an equality on products, from the northwestern territory, which includes the states bordering on Canada as far west as Idaho.

In disposing of the case the Commissioner said: "The record leaves no doubt but that the rates from Chicago to Fort Wayne should not be higher than the rates from Chicago to Indianapolis, but the carriers have failed to justify the increased rates which they have proposed in order to bring about this parity. And whether the rates from Peoria and

St. Louis to Fort Wayne should be reduced in like measure as those from Chicago cannot be definitely determined from this record. We find that the suspended schedules have not been justified. An order will be entered requiring their cancellation and discontinuing this proceeding."

REDUCTIONS IN FREIGHT CLAIMS

A 15 per cent reduction in freight loss and damage claims for the first six months of 1923, when compared with the same period of last year, and a 58 per cent reduction when the same comparison is made with the first half of 1921, has been accomplished, according to figures recently released by Lewis Pilcher, secretary of the freight claim division of the American Railway Association. The figures also reveal that the ratio of freight claims paid to the revenue received by the carriers has shrunk to 1.03 per cent, the lowest for the past 20 years with the exception of 1916, when an abnormally low figure was produced due to the carriers falling behind in their payment of claims.

A larger number of claims were paid than during previous periods, but this is due to the fact that the carriers handled a record-breaking tonnage during the first half of 1923. The payments per thousand tons of revenue freight carried actually dropped from \$71.29 in 1921 and \$34.07 in 1922 to a record figure of only \$20.62 for the first half of this year.

CANADIAN GRAIN RATES

The western freight rates issue will again be before Parliament this session. The arrangement under which there was a return to the Crows Nest rates on grain and flour, while the rest of the schedule was further suspended, will have run its full term July 6, and the whole question will come up again. Live stock westbound is also included in the reductions under the agreement, but east-bound rates on this commodity are much more important than westbound. The lapsing of the act of two years ago also brings about a change in rate making other than that affected by the Crows Nest agreement. The act of 1919, which was continued in force by the legislation of 1922, further gives the Railway Commission power to disregard all acts of the Parliament of Canada affecting rates, whether general or special, and applicable to only one railway. Under this power the Railway Commission has exercised the right to fix rates on electric railways under Dominion jurisdiction, in spite of the existence of contracts fixing rates. Unless an act is passed at the present session to continue this power to the Railway Commission, it will also lapse in July.

OCEAN RATES

Despite the protests from Secretary of Agriculture Wallace against the increase in ocean rates on packing house products, the North Atlantic United Kingdom Freight Lines put their new tariff, carrying an average advance of 25 per cent, into effect March 1. It applies largely on manufactured articles and covers practically the entire list of commodities shipped to British ports with the exception of grain and flour. The latter are not subject to conference control at this time, and for months have fluctuated according to situation in the tramp charter market.

The grain market was dull, but rates remained high as a result of the strong sugar demand. Quotations ranged around 14½ to 15 cents per 100 pounds to the Continent, four shillings a quarter of 480 pounds to the United Kingdom, 21 to 22 cents per 100 to Scandinavia and 17½ to 18 cents to the West Coast of Italy. Shippers were not inclined to pay these prices, according to a review by Funch, Edye & Co., but shipowners were content to place their vessels in the sugar trade. Demand for shipments to Greece were withheld because of unsettled political conditions in that country.

SOUTHERN RATE CASE SETTLED

The Commission, in a report on No. 12965, Merchants Exchange of St. Louis et al. vs. Aberdeen & Rockfish et al., opinion No. 9235, written by Commissioner Campbell, has found rates on grain, grain products, and feed, from Mississippi and Ohio River crossings, Cincinnati to New Orleans, inclusive, and points north and west thereof, to Mississippi Valley, Southeastern and Carolina territories, not unreasonable or unduly discriminatory. It has further found the transit and reshipping rules and the basing-point system of constructing rates on the commodities mentioned, in the territories enumerated, not unduly prejudicial to the complainants.

By dismissing the complaint the Commission has refused to change the system of making rates into

himself. A common method to ascertain correct selling price is to divide the cost by its per cent of the selling price. For example, if a gross profit of 20 per cent on sales is desired on a commodity costing \$2 per hundred weight, divide the \$2 by 80 per cent gives us \$2.50 as the correct selling price on which a gross profit of 50 cents is made and is 20 per cent gross on sales based on the unit of sale, or 100 pounds.

Another selling practice that merits consideration is the breaking of original packages of bran, middlings, scratch feed, etc. In many cases the seller charges the same price per pound in small lots as he receives for unbroken sacks and assumes the waste and shrinkage attendant to breaking the original packages.

A careful check up on that method of retailing will show the seller that he is reducing his net margin, because it is costing him more per hundred weight to sell in that way, and small lots will need be charged such proportionately higher rates as will cover the higher cost of handling.

The Fixed Feed Law

The manufacturing of mixed feeds has grown to tremendous proportions. I am informed that in Michigan there is at present registered with the Department of Agriculture over 900 different brands of feeding stuffs and each brand requires a license fee of \$20 to be paid annually. According to the Michigan law, the only mixed feed that we are permitted to manufacture and sell without payment of this annual license fee is that made from whole corn and oats mixed and ground together. Oats and barley, or oats and rye, barley and corn, or any other combination or mixture requires registration of each brand accompanied by the \$20 license fee, or their sale can be prohibited until the law is complied with.

Michigan elevators are assessed and pay liberal state taxes, a portion of which are used for the maintenance and operation of the Department of Agriculture and in addition must pay the same amount in license fees as feed manufacturers residing outside Michigan, from whom no property tax revenue is derived.

I should like to see a revision of license fees applicable to manufacturers and elevators, whose plants are located in Michigan, whereby we could secure registry as a feed manufacturer by the payment of an annual general license fee of \$20 for the privilege of manufacturing and in addition pay only \$2 per brand for each brand registered.

I am informed that the over \$18,000 now paid in as license fees for feeding stuffs is very much in excess of the amount required for proper field inspection and overhead expense for maintaining the feeding stuffs division. A reduction in license fee for each brand made in Michigan would not therefore cripple the Inspection or Supervision Department, but rather be a service to a large number of country elevator tax payers, who being equipped with grinding machinery would enable them to make scratch feed, mash, horse, dairy and pig feeds that can be sold in competition with pool car and co-operative selling.

Most of the basic grains needed for mixed feeds are produced in Michigan and it is recognized that single grain feeding is no longer profitable. Grains must be mixed and rations balanced and the farmer producing these grains should be entitled to buy them locally after being ground and mixed by his elevator with a minimum of handling margin added, and the reduction of the license fee to \$2 for each brand would permit the smaller country plant to supply his customers with high grade mixed feed at reasonable prices. In many cases the farmer would be greatly benefited through his getting locally a much better grade of feed at lower prices than some of the junk that is now being sold in the state.

Grinding Grain for Farmers

Another phase of elevator business in which cost sheets might reveal interesting facts is the custom grinding of grain.

I don't know why some of us, myself included, seem willing to make a good-sized investment for power and machinery for the custom grinding, then operate the investment so close that we would be better off without it.

There seems to be a great diversity of opinion on grinding costs. It is apparent that in good many instances "The I Don't Know Cost System" is the one preferably used. By that system of cost finding we just grind as cheap or cheaper than our competitor and await the survival of the fittest.

Make the Business Pay

I have no solution to offer you for the correction of these conditions, perhaps hours could be spent on many other rather inefficient practices common to our business, but after all that could be said, only the intelligent application by each individual elevator operator of his known and correct operating cost and the courage to ask an honest and fair margin over the cost for the service he renders, then only will that business and the entire industry be satisfactorily operated, and I can add truthfully that no business in the world renders a greater service than the Michigan elevator who never stops buying grain or beans on any business day of the year, always pays spot cash at the market price no matter how demoralized the market may be, or regardless of how many cars of unsold grain and beans his house may contain at the time. In other words, the farmer is permitted without any previous arrangement with or consent of the elevator man to transfer his risk of ownership in grain and beans on any day that suits the farmer's convenience. Check up that method of selling with other lines of business.

In closing I might add that where funds are being borrowed from a banker for operating, better keep mighty quiet around the bank about not knowing what it is costing to do business, lest the banker should suddenly decide he better take over the elevator to get first hand information on operating costs, when he may find he had been in the elevator business himself for several months before and did not know it and to get his money out, will have to sell to someone who will know their operating cost.

The miller's point of view was given by W. H. Sturgis of Flint, and then J. E. Martindale of Bay City pointed out how the retail business of an elevator could be handled on a cash basis. Frank Young of Lansing discussed the Federal hay grades and R. S. Pearce of Port Huron told of "Export Conditions and Their Effect on Grain Values." Before adjournment the following resolutions were adopted:

Be it resolved, that our secretary be instructed to advise the officers of the National Hay Association that we recognize no advantage to be had in changing from National Hay Association grade rules for hay to Federal rules for grades of this commodity.

Be it resolved, that our secretary be instructed to write the secretary of the National Horse Association that we fully appreciate the efficient work done by that organization in promoting the use of the horse, and that we desire to co-operate and help to promulgate their efforts.

and between points within the Southeast. The method in use, according to the complaint, unduly favored the dealers and wholesalers at the Ohio and Mississippi River crossings and the dealers and wholesalers within the territories mentioned.

In concluding his disposal of the case, Commissioner Campbell said:

It is apparent from the foregoing that the removal of complainants' disadvantages by the establishment of a differential or an increase in the present differential between the carload and less-than-carload rates from the river crossings would require a corresponding increase in the less-than-carload rates. There is upon this record no satisfactory showing that the any-quantity rates when applied on less-than-carload shipments throw any burden upon other traffic or are less than reasonable minima; nor does it contain sufficient evidence to enable us to ascertain the approximate difference in the cost of handling carload and less-than-carload traffic under these rates. Moreover, while increase in rates on less-than-carloads would be of advantage to complainants and the intervening wholesale grocers and jobbers, it would threaten the existence of many of the intervening millers and retailers in southern territory and result in increased cost of these foodstuffs to the consumer without corresponding advantage to complainants and their interveners. The system of rates on grain and grain products in this territory and the transit and reshipping arrangements maintained in connection therewith are the outgrowth of circumstances and conditions peculiar to this section of the country, and these circumstances and conditions, as before pointed out, differ in a marked degree from those in any other section of the country.

Intervening commercial associations and wholesalers at several points in the Southeast urge that the rates from the river gateways and beyond to those southeastern points are unduly prejudicial as compared with rates prescribed in the Mississippi Valley case to competitive points in Mississippi Valley territory. For example, the carload rates on wheat and corn from Chicago are 35.5 cents to Meridian, 728 miles, and 38.5 cents to Mobile, 866 miles, as compared with a rate of 50.5 cents to Montgomery, 747 miles. The difference in these rates is measured by the difference in the rates from the river gateways, which are and have been for many years on a lower level to the Mississippi Valley than to the Southeast. The proper relationship between the rates to these two territories can not be determined upon this record.

We find that the rates attacked are not unreasonable, and that the assailed rates, transit and reshipping rules, and the basing-point system of constructing rates are not unduly prejudicial to complainants. The complaint will be dismissed.

The conclusions herein are without prejudice to any changes in these rates or rate relationships, which may follow our findings in No. 13494, Southern Class Rate Investigation, now pending.

ST. LAWRENCE WATERWAY PROJECT STARTS RIVALRY

Prospects of a mighty controversy between various cities on the Great Lakes in case the St. Lawrence project goes through loomed up when it was learned from official sources that the engineers on the International Joint Commission are figuring on only one port on each lake for dredging to the proposed depth of 30 feet.

Among the strongest bidders are Chicago, Detroit, Duluth, Milwaukee and Cleveland. On Lake Ontario, it is pointed out, there is likely to be a controversy between Rochester and Oswego, with the latter claiming superior connections for distribution through New England; on Lake Erie, Buffalo, Erie, Cleveland and Toledo, all feel that they are entitled to be a port of call for big vessels, while Detroit cannot be left out of consideration; on Lake Michigan, the chief controversy is expected to be between Chicago and Milwaukee, but on Lake Superior, Duluth is virtually in a class by itself.

The selection of the ports to be deepened, it is assumed would rest with Congress, though the functions of recommending would lie with the engineers making the survey.

NEW FACILITIES IN CANADA

The Canadian Pacific plans to add to its facilities in a number of ways. Additional yard trackage will be installed between Fort William, Ont., and Port Arthur to provide for new terminal elevators at the Head of Lakes. There will be laid 150 miles of new 100-pound railroad between Toronto and Fort William. Extensions of terminal tracks are planned at Ignace, Kenora and Wynyard. A new terminal power house will be built at Winnipeg.

SHIPMENTS THROUGH NEW ORLEANS

Grain exports from New Orleans during February, according to the report of the Board of Trade of that city, included 145,100 bushels wheat, 1,160,000 bushels corn and 18,215 bushels of oats. Since July 1 the port has exported 5,829,695 bushels of wheat, as compared with 22,724,543 bushels for the same period last year.

RECORD LOADINGS

Car loadings on American railroads reached a new high point for the current year during the week ended March 1, when they totaled a little more than 945,000 cars. This compares with 845,898 cars the week before and 917,896 cars in the same week last year.

MANY new routes for the movement of grain have been reported in the past few months, the latest being the shipment of 500 tons of North Pacific wheat, shipped from the Columbia River, via Panama, to Galveston where it will be milled into flour.

RECEIPTS AND SHIPMENTS

Following are the receipts and shipments of grain, etc., at the leading terminal markets in the United States for February:

BALTIMORE—Reported by Jas. B. Hessong, Secretary of the Chamber of Commerce:

| Receipts | | Shipments | |
|------------------|-----------|-----------|-----------|
| 1924 | 1923 | 1924 | 1923 |
| Wheat, bus.. | 1,393,044 | 980,793 | 1,884,996 |
| Corn, bus.. | 311,783 | 2,943,050 | 763,629 |
| Oats, bus.. | 29,897 | 71,249 | 34,897 |
| Barley, bus.. | 2,174 | 2,311 | ..... |
| Rye, bus.. | 172,255 | 3,050,271 | 128,949 |
| Malt, bus.. | 8,220 | 49,226 | 1,976 |
| Buckwheat, bus.. | 2,494 | 1,345 | ..... |
| Straw, tons.. | 36 | 63 | ..... |
| Hay, tons.. | 2,011 | 869 | ..... |
| Flour, bbls.. | 167,893 | 82,213 | 26,066 |

CHICAGO—Reported by J. J. Fones, secretary of the Board of Trade:

| Receipts | | Shipments | |
|-------------------------|------------|------------|-----------|
| 1924 | 1923 | 1924 | 1923 |
| Wheat, bus.. | 1,512,000 | 1,564,000 | 954,000 |
| Corn, bus.. | 14,740,000 | 15,258,000 | 5,309,000 |
| Oats, bus.. | 6,560,000 | 5,936,000 | 3,212,000 |
| Barley, bus.. | 228,000 | 685,000 | 397,000 |
| Rye, bus.. | 250,000 | 948,000 | 40,000 |
| Timothy Seed, lbs.. | 1,298,000 | 1,352,000 | 2,031,000 |
| Clover Seed, lbs.. | 1,641,000 | 629,000 | 1,105,000 |
| Other Grass Seed, lbs.. | 2,521,000 | 1,682,000 | 1,619,000 |
| Flax Seed, bus.. | 59,000 | 11,000 | 2,000 |
| Hay, tons.. | 16,535 | 8,849 | 1,350 |
| Flour, bbls.. | 1,040,000 | 1,050,000 | 744,000 |

CINCINNATI—Reported by D. J. Schuh, executive secretary of the Cincinnati Grain & Hay Exchange:

| Receipts | | Shipments | |
|--------------------|---------|-----------|---------|
| 1924 | 1923 | 1924 | 1923 |
| Wheat, bus.. | 613,200 | 339,600 | 369,600 |
| Corn, bus.. | 733,000 | 402,000 | 432,600 |
| Oats, bus.. | 322,000 | 190,000 | 174,000 |
| Barley, bus.. | 1,400 | 7,800 | ..... |
| Rye, bus.. | 7,000 | 3,600 | 2,800 |
| Kaffir Corn, bus.. | 2,400 | 3,600 | ..... |
| Hay, tons.. | 8,536 | 6,765 | ..... |

CLEVELAND—Reported by F. H. Baer, Traf. Com., of the Chamber of Commerce:

| Receipts | | Shipments | |
|---------------|---------|-----------|--------|
| 1924 | 1923 | 1924 | 1923 |
| Wheat, bus.. | 48,248 | 79,707 | 8,224 |
| Corn, bus.. | 269,810 | 321,418 | 32,062 |
| Oats, bus.. | 135,263 | 220,172 | 17,231 |
| Barley, bus.. | 4,459 | 12,194 | ..... |
| Rye, bus.. | ..... | 2,426 | ..... |
| Hay, tons.. | 2,934 | 2,109 | 10 |

DULUTH—Reported by Chas. F. MacDonald, secretary of the Board of Trade:

| Receipts | | Shipments | |
|------------------|-----------|-----------|---------|
| 1924 | 1923 | 1924 | 1923 |
| Wheat, bus.. | 972,880 | 3,508,219 | 645,589 |
| Corn, bus.. | 2,109,283 | 121,745 | 60,966 |
| Oats, bus.. | 387,476 | 45,391 | 10,430 |
| Barley, bus.. | 22,716 | 122,062 | 48,758 |
| Rye, bus.. | 600,550 | 1,765,835 | 22,722 |
| Flax Seed, bus.. | 111,345 | 56,742 | 2,191 |
| Flour, bbls.. | ..... | 229,012 | 87,224 |
| | | 63,465 | 66,370 |

FORT WILLIAM, ONT.—Reported by E. A. Ursell, statistician of the Board of Grain Commissioners, for Canada:

| Receipts | | Shipments | |
|------------------|-----------|-----------|-----------|
| 1924 | 1923 | 1924 | 1923 |
| Wheat, bus.. | 3,874,433 | 3,176,027 | 1,631,962 |
| Corn, bus.. | 4,296 | 9,216 | 4,296 |
| Oats, bus.. | 1,409,573 | 686,536 | 488,247 |
| Barley, bus.. | 588,728 | 336,653 | 316,089 |
| Rye, bus.. | 88,442 | 212,233 | 2,356 |
| Flax Seed, bus.. | 63,946 | 48,807 | 79,929 |
| Hay, tons.. | ..... | 128,541 | ..... |

INDIANAPOLIS—Reported by Wm. H. Howard, secretary of the Board of Trade:

| Receipts | | Shipments | |
|---------------|-----------|-----------|-----------|
| 1924 | 1923 | 1924 | 1923 |
| Wheat, bus.. | 395,000 | 241,000 | 309,000 |
| Corn, bus.. | 2,366,000 | 1,415,000 | 1,511,000 |
| Oats, bus.. | 988,000 | 626,000 | 936,000 |
| Rye, bus.. | 4,000 | 17,000 | 7,400 |
| Flour, bbls.. | 38,144 | 48,722 | ..... |

KANSAS CITY—Reported by W. R. Scott, secretary of the Board of Trade:

| Receipts | | Shipments | |
|--------------------|-----------|-----------|-----------|
| 1924 | 1923 | 1924 | 1923 |
| Wheat, bus.. | 4,179,600 | 4,059,450 | 2,137,050 |
| Corn, bus.. | 3,525,000 | 1,892,500 | 1,581,250 |
| Oats, bus.. | 963,900 | 880,600 | 579,000 |
| Barley, bus.. | 91,500 | 100,100 | 20,800 |
| Rye, bus.. | 26,400 | 11,000 | 6,600 |
| Kaffir Corn, bus.. | 578,600 | 233,200 | 308,000 |
| Hay, tons.. | 33,072 | 20,952 | 15,136 |
| Flour, bbls.. | 35,675 | 53,625 | 460,525 |

LOS ANGELES—Reported by secretary of the Grain Exchange:

| Receipts | | Shipments | |
|--------------------------|------|-----------|-------|
| 1924 | 1923 | 1924 | 1923 |
| Wheat, carloads .. | 236 | 262 | ..... |
| Corn, carloads .. | 209 | 97 | ..... |
| Oats, carloads .. | 10 | 19 | ..... |
| Barley, carloads .. | 115 | 119 | ..... |
| Seed, carloads .. | 29 | ..... | ..... |
| Kaffir Corn, carloads .. | 14 | 5 | ..... |
| Flour, carloads .. | 253 | 138 | ..... |

MINNEAPOLIS—Reported by G. W. Maschke, statistician secretary of the Chamber of Commerce:

| Receipts | | Shipments | |
|------------------|-----------|-----------|-----------|
| 1924 | 1923 | 1924 | 1923 |
| Wheat, bus.. | 7,534,430 | 6,354,620 | 3,045,630 |
| Corn, bus.. | 2,435,080 | 753,000 | 2,141,470 |
| Oats, bus.. | 2,385,130 | 1,528,910 | 2,089,620 |
| Barley, bus.. | 1,130,700 | 862,250 | 1,097,630 |
| Rye, bus.. | 600,570 | 1,200,190 | 138,510 |
| Flax Seed, bus.. | 249,700 | 248,720 | 132,320 |
| Hay, tons.. | 3,015 | 2,192 | 330 |
| Flour, bbls.. | 119,706 | 85,677 | 1,135,583 |

MILWAUKEE—Reported by H. A. Plumb, secretary of the Chamber of Commerce:

| Receipts | | Shipments | |
|---------------------|-----------|-----------|-----------|
| 1924 | 1923 | 1924 | 1923 |
| Wheat, bus.. | 162,400 | 256,200 | 184,275 |
| Corn, bus.. | 3,362,600 | 2,433,120 | 1,003,363 |
| Oats, bus.. | 1,317,800 | 2,149,400 | 1,328,927 |
| Barley, bus.. | 768,000 | 658,880 | 273,980 |
| Rye, bus.. | 260,360 | 707,730 | 42,280 |
| Timothy Seed, lbs.. | 272,100 | 661,880 | 1,146,965 |
| Clover Seed, lbs.. | 137,705 | 113,824 | 1,072,625 |
| Flax Seed, bus.. | 14,250 | 108,610 | ..... |
| Hay, tons.. | 1,859 | 850 | 468 |
| Flour, bbls.. | 114,770 | 48,250 | 31,460 |

NEW ORLEANS—Reported by S. B. Fears, inspector and weighmaster of the Board of Trade, Ltd.:

| Receipts | | Shipments | |
|--------------|-------|-----------|-----------|
| 1924 | 1923 | 1924 | 1923 |
| Wheat, bus.. | | 145,100 | 903,546 |
| Corn, bus.. | | 1,160,042 | 1,701,776 |
| Oats, bus.. | | 18,215 | 66,990 |
| Rye, bus.. | | | 154,255 |

NEW YORK CITY—Reported by H. Heinzer, statistician of the Produce Exchange:

| Receipts | | Shipments | |
|----------------------|-----------|-----------|-----------|
| 1924 | 1923 | 1924 | 1923 |
| Wheat, bus.. | 3,372,600 | 3,075,800 | 4,362,000 |
| Corn, bus.. | 576,000 | 2,553,000 | 53,000 |
| Oats, bus.. | 828,000 | 546,000 | 150,000 |
| Barley, bus.. | 227,800 | 79,900 | 597,000 |
| Rye, bus.. | 216,000 | 490,000 | 283,000 |
| Timothy Seed, lbs.. | ..... | ..... | 462 |
| Clover Seed, bags .. | ..... | 2,067 | 3,921 |
| Flax Seed, bus.. | 128,500 | 1,009,000 | ..... |
| Hay, bales .. | 5,377 | 3,922 | 636 |
| Flour, bbls.. | 1,045,835 | 910,750 | 611,000 |

OMAHA—Reported by F. P. Manchester, secretary of the Grain Exchange:

| Receipts | | Shipments | |
|---------------|-----------|-----------|-----------|
| 1924 | 1923 | 1924 | 1923 |
| Wheat, bus.. | 1,731,800 | 1,654,800 | 1,353,800 |
| Corn, bus.. | 4,883,000 | 2,602,600 | 4,477,200 |
| Oats, bus.. | 1,244,000 | 1,028,000 | 1,800,000 |
| Barley, bus.. | 28,000 | 43,200 | 84,800 |
| Rye, bus.. | 54,600 | 186,200 | 42,000 |

PEORIA—Reported by John R. Lofgren, secretary of the Board of Trade:

| Receipts | | Shipments | |
|--------------------|-----------|-----------|-----------|
| 1924 | 1923 | 1924 | 1923 |
| Wheat, bus.. | 79,600 | 135,600 | 103,200 |
| Corn, bus.. | 1,853,600 | 1,727,700 | 1,060,550 |
| Oats, bus.. | 1,220,100 | 853,400 | 968,850 |
| Barley, bus.. | 144,800 | 36,400 | 53,200 |
| Rye, bus.. | 6,000 | 99,600 | 24,600 |
| Mill Feed, tons .. | 36,300 | 27,890 | 36,152 |
| Hay, tons.. | 2,100 | 1,310 | 320 |
| Flour, bbls.. | 184,600 | 146,400 | 177,400 |

PHILADELPHIA—Reported by A. B. Clemmer, secretary of the Commercial Exchange:

| Receipts | | Shipments | |
|---------------|-----------|-----------|-----------|
| 1924 | 1923 | 1924 | 1923 |
| Wheat, bus.. | 2,689,094 | 3,955,739 | 2,866,118 |
| Corn, bus.. | 534,405 | 1,660,003 | 591,437 |
| Oats, bus.. | 110,264 | 261,998 | ..... |
| Barley, bus.. | 16,427 | 4,439 | 44,372 |
| Rye, bus.. | 1,823 | 43,298 | 19,286 |
| Flour, bbls.. | 201,568 | 250,202 | 41,863 |

PORTLAND, ME.—Reported by Howard H. Waldron, traffic manager of the Chamber of Commerce:

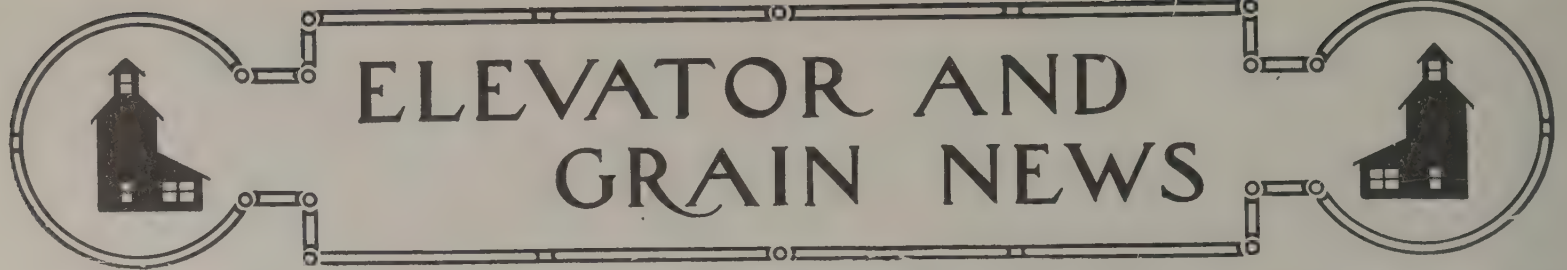
| Receipts | | Shipments | |
|---------------|---------|-----------|-----------|
| 1924 | 1923 | 1924 | 1923 |
| Wheat, bus.. | 904,896 | 1,596,440 | 1,500,842 |
| Corn, bus.. | 4,212 | 41,232 | ..... |
| Oats, bus.. | 81,384 | 336,073 | 213,260 |
| Barley, bus.. | 292,486 | 245,814 | 92,500 |
| Rye, bus.. | ..... | 214,786 | 102,857 |

ST. LOUIS—Reported by Eugene Smith, secretary of the Merchants' Exchange:

| Receipts | | Shipments | |
|--------------------|-----------|-----------|-----------|
| 1924 | 1923 | 1924 | 1923 |
| Wheat, bus.. | 2,259,896 | 2,257,383 | 2,020,840 |
| Corn, bus.. | 5,392,800 | 3,120,000 | 3,584,160 |
| Oats, bus.. | 3,092,000 | 1,939,190 | 3,030,180 |
| Barley, bus.. | 57,600 | 83,200 | 35,180 |
| Rye, bus.. | 14,300 | 23,100 | 14,860 |
| Kaffir Corn, bus.. | 30,000 | 28,800 | 22,100 |
| Hay, tons.. | 12,192 | 10,062 | 6,090 |
| Flour, bbls.. | 457,160 | 343,520 | 563,390 |

SAN FRANCISCO—Reported by H. C. Bunker, chief inspector of the Chamber of Commerce:

| | Receipts | | Shipments | |
|---------------|----------|--------|-----------|-------|
| | 1924 | 1923 | 1924 | 1923 |
| Wheat, tons.. | 13,797 | 4,188 | ..... | ..... |
| Corn, tons .. | 2,682 | 1,794 | ..... | ..... |
| Oats, tons .. | 843 | 1,086 | ..... | ..... |
| Barley, tons. | 21,279 | 35,799 | ..... | ..... |
| Bran, tons .. | 890 | 421 | ..... | ..... |
| Beans, sacks. | 69,029 | 40,358 | ..... | ..... |
| Hav. tons... | 7,055 | 3,330 | ..... | ..... |



EASTERN

The house of the Chase Grain Company at Plymouth, N. H., which burned is to be rebuilt.

A 75x35 foot addition has been completed to the Oldtown plant of the Eastern Grain Company of Bangor, Maine.

The Cook Grain, Feed & Supply Company of Dillsburg, Pa., has sold its business interests to Firestone & Shillits.

The grain and lumber plant of Chas. Barber at Windsor, Vt., which burned during January, is to be rebuilt at once.

The capital stock of the Eastern Grain, Mill & Elevator Corporation at Buffalo, N. Y., has been increased from \$5,000,000 to \$6,000,000.

The grain elevator and the warehouse of Vernon N. Simmons at Hagerstown, Md., have been bought by the Farmers Co-operative Company of Washington County, Md.

To deal in grain and conduct a cereal business, the Cortland Milling Company, Inc., has been incorporated at Manhattan, New York City. Edw. D. Murphy, G. B. Haste, and O. B. Vunck are interested.

A warehouse with storage capacity of 25 cars of grain, produce and flour, has been completed by Torrence, Vary & Co., dealers in grain, flour and feeds at Lynn, Mass. The sides and roof are of steel shell and are fireproof.

The plant of the S. W. Thaxter Company at Portland, Maine, has been bought by the New England Grain Company. This business and that already conducted by the company will be combined. L. Herman is president and Alfred Herman, treasurer of the company.

WESTERN

Vinton T. Rhodes is now with the Inter-Ocean Elevator at Victor, Idaho.

The Ronstadt Grain Company of Tucson, Ariz., has changed its name to the Farmers Supply Company.

A grain warehouse is to be built at Alhambra, Calif., for the West Coast Grain Company of Los Angeles.

The Hugh B. Clark Company of Puyallup, Wash., has rented a building and will expand into a large business.

The Conley-Ross Grain Company has bought the Miller Elevator at Platner, Colo., and will make repairs on it.

A large addition has been built to the elevator of W. A. Gray at Buhl, Idaho. A new grinder has also been installed.

The capital stock of the Montana Elevator Company of Lewistown, Mont., has been increased from \$200,000 to \$500,000.

Edward Mahler is now with the Standard Grain Company of Los Angeles, Calif. He was formerly with L. M. Bardet, flour brokers.

The Summit Grain Company of Denver, Colo., rebuilt its elevator which burned and was expecting at last reports to have it completed by the first of March.

The Laramie, Wyo., plant of the Hylton Flour Mills, Inc., is to be reopened as a grain elevator with John Holley in charge. The mill will not be operated at present.

A large addition will probably be built to the house of the Martin Grain & Milling Company at Cheney, Wash. It has bought lots opposite the mill for this purpose.

A lease on the Good Building at Colfax, Wash., has been taken out by C. W. McFarland of the Colfax Grain & Feed Company. They moved into their new location February 1.

The Sargent-Staude Company's new elevator at Fowler, Colo., has been completed. It has capacity of 9,600,000 pounds, and the bean elevator in connection with it has capacity of 10 cars.

The Morrison Grain Company of Walla Walla, Wash., which has been conducting a grain business there for some time has increased the scope of its business and will now handle insurance.

John M. Perry has retired from the grain firm of Melone & Perry at Stockton, Calif., which he and Gilbert S. Melone conducted for 21 years. Mr. Melone has taken over the entire interests of Mr. Perry and will conduct the business alone. Mr.

Melone when he entered the partnership had had years of experience in the grain business, first with Smith & Wright and later with H. E. Wright & Sons and Wright & Dickinson.

A branch will be established, probably at Los Angeles, Calif., by J. H. Klosterman of the J. H. Klosterman Grain Company of Portland, Ore. The company will deal in grain, feed, and screenings.

A partnership has been formed by A. A. Galt and Roy Day at Hughson, Calif., who will conduct a general grain and warehouse business in the warehouse which was bought by Mr. Galt from the Grange Company.

THE DAKOTAS

J. R. Fleming succeeds L. P. Bremer as manager of the Farmers Elevator at Kampeska, S. D.

An automatic scale has been installed by Joe Asenbauer in his elevator at Herreid, S. D.

The Osborne-McMillan Elevator at Forman, N. D., has been moved to a new site in the same town.

Wm. McFadgen, is succeeded as manager of the Farmers Elevator Company at Maza, N. D., by I. J. Hough.

G. J. Graff has bought his father's interest in the elevator at Rutland, S. D., and is operating it in his own name.

The Regent Grain Company of New England, N. D., has been incorporated and will now be known as the Pechtl-Bowers-Gardner Company.

N. J. Steffen has bought his brother's interest in the Steffen Grain Company at Belfield, N. D., and will continue operations under the old name.

A. Zorba has leased the elevator which the Farmers Co-operative Grain & Livestock Association has been operating at Herrick, S. D. The elevator will be sold in the future.

H. W. Speight has installed a new steel elevator leg at Redfield, S. D., with distributor and enclosed motor at the head. Several improvements are being made to the cleaning system of the elevator.

IOWA

Roy Follansbee is now manager of the Beaman Elevator Company of Beaman, Iowa.

A new grinder has been installed by J. F. Gamerdinger in his elevator at Remsen, Iowa.

The elevator of the H. Dryer, Jr., Estate at Appleton, Iowa, is to be remodeled this spring.

The elevator business of George Schissel at Vincent, Iowa, has been bought by the Farmers Elevator Company.

M. B. McVeigh is no longer manager of the Farmers Elevator at Kamrar, Iowa, but is succeeded by J. Hass.

The elevator of the Portland Co-operative Company located at Portland, Iowa, which burned in January is to be rebuilt.

Walsworth & Johnston of Greenfield have bought the Thos. Woof grain and coal business at Stuart, Iowa, and will take immediate possession.

The managements of the Green Mountain Farmers Elevator and the Green Mountain Shippers Association at Green Mountain, Iowa, have been consolidated.

Ray Tierney of Des Moines, representative of the Armour Grain Company, has bought the two elevators of the Stokley Grain Company of Des Moines, at Bouton, Iowa.

A. J. Hinton represents the W. M. Bell Grain Company at Sheldon, Iowa. The company has seven branches, three in Iowa, three in Minnesota and one in South Dakota.

The interests of Noll & Lingle of Bethany in the business of the Biddison Coal & Grain Company at Leon, Iowa, have been bought by C. O. Graham of Bethany, Mo. The firm will be known as the Biddison-Graham Grain Company.

R. M. Twedt, Jessie Tow and A. T. Swayer have sold the Le Grand Elevator Company, Le Grand, Iowa, to the Cronk Bros. of Montour, who own a lumber yard there. Tom Mikkelsen of Montour will run the elevator at Le Grand.

The Trans-Mississippi Grain Company's new elevator of 25,000 bushels' capacity, has been completed at Smithland, Iowa. It is equipped with an 8-horsepower engine, one stand of elevators, one

300-bushel hopper scale and other up-to-date equipment. The elevator is covered with 1½-inch corrugated galvanized iron and roofed with four-ply asbestos roofing. The foundation and floors are of concrete.

The new 20,000-bushel elevator at Percival, Iowa, which replaces the one which burned in October, has been completed. The house is of iron clad construction with asbestos roof and concrete foundation and is owned by the Kellogg & Wilson Grain Company.

The new elevator of G. G. Garver at Clearfield, Iowa, replacing the one which burned last year, has been completed. It is equipped with a sheller and drag, a gyrating cleaner, an electric truck dump, one stand of elevators, a 500-bushel hopper scale, three rollers and other machinery. Three motors supply the power.

The lumber business of the Garrison Grain & Lumber Company and the Farmers Lumber & Grain Company at Garrison, Iowa, has been sold to the Midwest Lumber Company of Dubuque, which took possession March 1. The new company does not take over the elevators but will take charge of the coal business of the Farmers Lumber & Grain Company.

MINNESOTA AND WISCONSIN

The Farmers Grain Company of Canby, Minn., is going to begin the erection of an addition to its elevator soon.

The elevator of the Monarch Elevator Company at Appleton, Minn., which Stromewald & Stensrud bought recently, is being wrecked.

The Farmers Elevator Company of Sleepy Eye, Minn., has installed an attrition mill. The company will now handle tankage, oil meal, bran and shorts and grind feed.

The Pipestone Farmers Elevator Company at Pipestone, Minn., is being reorganized. The directors are J. Keys, S. Gilliland, P. H. Brandland, H. C. Logane, E. N. Payne and B. Milligan.

The Builders Service Company has been organized at Birnamwood, and Aniwa, Wis., to conduct a retail business in grain, fuel, hay and feed. C. W. Fish is president and Otis L. Pennington, vice-president of the company.

An elevator of 450,000 bushels' capacity is to be built for the Spencer Kellogg & Sons, Inc., at Minneapolis, Minn., alongside the company's mill at that city. The contract for the elevator was awarded to the Fegles Construction Company, and the elevator is expected to be in shape for operation in time to handle this year's crop. The Spencer Kellogg company has houses at Minneapolis, Buffalo, New York and Superior, with headquarters at Buffalo. The new elevator will provide adequate storage space for the growing business of the company which handles 6,000 bushels of linseed a day in Minneapolis. The workinghouse will be 175 feet high and storage tanks 60 feet high.

INDIANA

The elevator of the Hirsch Bros. at Converse, Ind., has been bought by Knox & Newell. He will take possession on April 1.

The interest of H. Barnett in the Lapel Lumber & Grain Company at Lapel, Ind., has been sold by him. He will give his entire attention to his lumber yards.

Arthur Delauter is manager of the Farmers Elevator Company at Laketon, Ind., succeeding O. W. Williams who resigned some time ago. Mr. Williams has accepted a similar position with an elevator at Winamac, Ind.

The contract has been let by the New Richmond Lumber & Coal Company, New Richmond, Ind., for the erection of a 10,000-bushel studded elevator. It will have four motors and will be equipped with silent chain drives.

Harry A. Lawson, for a time a member of the grain firm of Richards & Lawson, Shelbyville, Ind., has been elected president of the Security Trust & Savings Bank of Shelbyville. He was until recently manager of the American Hominy plant there.

Cohee & Clark of Kempton, Ind., have let the contract for a 60,000-bushel cribbed elevator, to be equipped with modern machinery, three legs, 16x8 inch cups, three platforms, dumps, and two truck dumps, sheller, cleaner, 800-bushel hopper scale.

manlift, car puller, five motors of 10-horsepower and one of 25-horsepower, all with silent chain drives. The feed room will be equipped with a feed grinder and one 40 and one 1-horsepower motor.

Herbert Fry has resigned as manager of the co-operative elevator at Winamac, Ind., and is now Indiana representative of the Arcady Farms Milling Company.

CANADA

A new elevator is to be erected at Lumsden, Sask., replacing the one which burned this winter.

Two old elevators at Fort William, Ont., known as "A" and "C," have been reopened by the Canadian Pacific Railway. Their combined capacity is 2,500,000 bushels.

The Saskatchewan Elevator Company, which has leased the Port Arthur (Ont.) Elevators of the Canadian National Railways, is installing 17 new grain cleaners at a cost of \$75,000.

Plans have been prepared by the Lake of the Woods Milling Company, Ltd., of Keewatin, Ont., for the erection of a grain elevator there. The milling company also plans to build a new elevator at Medicine Hat, Alta.

George Serls, chief grain inspector for Canada, has resigned his position to take place at the end of March. Mr. Serls has held the position of chief grain inspector since 1912, and has been with the department for 30 years. It is not known definitely who will succeed Mr. Serls if his resignation is accepted.

C. D. Howe, consulting engineer for the Canadian Government, has made the recommendation that a grain elevator of 3,500,000 bushels' capacity be built at Prince Rupert, B. C., by the Canadian National Railways. The recommendation was made to A. E. Warren, general manager of the railroad at Winnipeg, Ont.

The Harbor Board has taken over the uncompleted Woodward Elevator at Vancouver, B. C., and will lease the property to the British Oriental Grain Elevator Company, of Edmonton, Alta., which has just been incorporated by a number of leading grain dealers of Alberta. The company will complete the elevator and operate it.

OHIO AND MICHIGAN

A. B. Bullard & Son have opened their new grain elevator at Shepardsville, Mich.

The Arcadia Elevator Company of Arcadia, Ohio, has installed a new motor and feed grinder.

The elevator at Savona, Ohio, has been bought from Samuel Warner of Greenville, by D. L. Mote.

The Peoples Hancock Elevator & Supply Company at Findlay, Ohio, has been bought by John and Henry Hochstetler of Bluffton.

The B. & O. Elevator at East Sandusky, Ohio, is being torn down. It was bought a short time ago by the Kelley's Island Lime & Transport Company.

The elevator of the New Waverly Elevator Company at New Waverly, Ohio, has been rebuilt. The same parties control the company now as formerly.

The capital stock of the Hartford Gleaners Co-operative Elevator Company of Hartford (R. F. D. Keeler), Mich., has been decreased from \$60,000 to \$30,000.

Marcus Yager has bought Jesse Rupp's interest in the business conducted at West Unity, Ohio, as Yager & Rupp and is now sole proprietor of the business.

An office has been opened at Van Wert, Ohio, by H. H. Chaney and Oliver Moomaw of Stewardson, Ill. They will conduct a wholesale grain, hay and feed business.

A cement or tile silo type elevator is to be built at Circleville, Ohio, with a capacity of between 10,000 and 15,000 bushels by the Pickaway County Farm Bureau.

The Elmdale Elevator Company of Elmdale, Mich., has asked that it be dissolved and that a receiver be appointed. Its assets are \$6,306 and liabilities \$26,872.

The interest of the L. G. Jebavy Company of Custer, Mich., has been sold by it to B. F. Brunke of Fountain. Mr. Brunke has taken possession of the grain elevator and warehouse.

The elevator at Casstown, Ohio, owned by the Swearingen Grain Company, has been bought by Martin & Rehmer. They will operate it in connection with their house at Troy.

The Llewellyn Bean Company has been incorporated at Grand Rapids, Mich., capitalized at \$600,000 and 80,000 shares of common stock. The company owns the largest bean elevator at Grand Rapids, Mich., with capacity of 85 cars. Fred E. Llewellyn is president; John S. McDonald, vice-president and Alvin S. Bredshall, secretary and treasurer.

The Tustin Elevator & Lumber Company of Tustin, Mich., succeeds the Dighton Grain Company and the Tustin Warehouse Company, capitalized at \$20,000. The warehouse company was organized several years ago by John W. Perry and C. Edgett. The Dighton Grain Company was organized at

Dighton by J. L. Smith and Roy L. Kent. The company moved to Tustin a short time ago. The officers of the new company are: President, Roy L. Kent of Reed City; secretary-treasurer, J. Harry Smith of Tustin.

The elevator and flour mill at Clyde, Ohio, has been bought by Charles Franke, a former resident of Fostoria, Ohio, now residing in Toledo. A new company is being organized of which he will assume active management.

The grain elevator of the Lock Two Grain & Milling Company at St. Marys, Ohio, has been bought by John Edgar Snapp. Mr. Snapp will be assisted in operating the house by his son, Edgar Snapp, Jr. E. J. Garmhauser who for two years has been in charge of the business has gone to Bluefields, W. Va., where he will be a director of community service.

ILLINOIS

I. Barrett is manager for the Elmwood Elevator Company of Elmwood, Ill.

John Schneider has resigned as manager of the C. E. Gallagher Elevator at Clarion, Ill.

Coal conveying machinery is being installed by the White Elevator Company of El Paso, Ill.

The Harley Worsley Company is succeeded at Mahomet, Ill., by the Inland Grain Company.

The new elevator of the Inland Grain Company at Wing, Ill., has been completed and is in operation.

The Union Elevator at Chicago, Ill., has been discontinued, it is reported, by the Export Elevator Company.

A new 10-ton wagon scale has been installed by the Farmers Co-operative Elevator Company of Worden, Ill.

C. H. Wayne has leased his Reynolds, Ill., house to the Farmers' Co-operative Elevator Company for three years.

The elevator interests of the late W. S. Northrop at Winchester, Ill., have been taken over by his son, H. L. Northrop.

Glenn Marshall succeeds Walter Howell as manager of the Stronghurst Grain & Merchandise Company of Stronghurst, Ill.

Bowers & Atherton of Williamsburg (Lovington P. O.), Ill., have dissolved. Elvin Atherton is now conducting the business.

Moschel & Robbins of Washburn, Ill., a grain partnership, has been dissolved. Mr. Moschel will conduct under the same name.

The Wallace Co-operative Grain & Supply Company which operates at Ottawa, Ill., is to be incorporated, capitalized at \$50,000.

John Karcher & Son of Herscher, Ill., have changed their name to John S. Karcher. The change was made January 1, 1924.

The capital stock of the Farmers Grain Company of Bulpitt (mail to Taylorville), and Kincaid has been increased from \$20,000 to \$36,000.

The partnership of Gross & Stevens, dealers in grain, feed and coal at Clayton, Ill., has been dissolved and Mr. Gross will continue the business alone.

D. A. Alexander has left the elevator at La Prairie, Ill., where he was manager and has gone to Colmar where he is with the Farmers Elevator Company.

The property of the Pierson Grain & Supply Company of Pierson, Ill., has been repainted and generally improved. S. H. Baker is manager of the company.

Ralph Wells of Monmouth, Ill., has bought the elevators at Ormonde (Monmouth P. O.), and Cameron, Ill., formerly belonging to and operated by J. C. Smith.

The Catlin Grain Company succeeds the Catlin Farmers Elevator Company at Catlin, Ill., and has taken over the property there. The firm is capitalized at \$20,500.

G. C. McFadden & Co., of Peoria, Ill., are remodeling their grain elevator at Biggs (Havana P. O.), Ill., and adding new machinery supplied by the Union Iron Works, of Decatur, Ill.

The grain elevator of Frank Heffelbower at Sterling, Ill., has been bought by A. Capp and J. H. Gerdes. They took possession March 1 and will operate as Capp & Gerdes, cash grain elevator.

A 35,000-bushel, ironclad, cribbed elevator is to be built at Carlock, Ill., by the Carlock Farmers Elevator Company. The equipment includes two legs with Constant V Buckets, motor drives and automatic scales.

A tentative company has been formed, by a committee of members of the farmers corporations of Illinois, which proposes to buy the concrete elevator at East Peoria, Ill., and to do a general grain business in commissions, buying and selling. The company if permanently organized would operate at Peoria under the name of the Co-operative Terminal Elevator Company. The East Peoria elevator has a capacity of 500,000 bushels and has been idle for

a year. It was built by the Conover-McHenry Grain Company, at a cost of \$350,000, and when that company failed in 1920 the plant was leased by Jackson Bros. & Co. They ceased operating it a year ago.

Search is still being made for John Nelson, a retired grain merchant of Donovan, Ill., who disappeared early in March from his daughter's home in Chicago. He operated an elevator in Donovan for years, selling out in 1919.

Articles of incorporation have been filed by the Peterson Grain Company of Grandridge, Ill., capitalized at \$20,000. Charles W. Peterson, Emma H. Peterson, Howard A. Stotler and Myron J. Stotler are interested in the company.

The grain business and mill of Canham & Co., at Virden, Ill., has been taken over by the Farmers' Consolidated Co-operative Association. The feed business will be continued by Canham & Co., until after the mill is placed in operation.

Otto A. Snodgrass, George D. Locke and Henry A. Liedel have incorporated at Springfield (R. R. No. 8), Ill., as the Peerless Mill & Elevator Company. Its capital stock is \$100,000. The Peerless firm succeeds Liedel & Co., in business at Springfield.

The Manlius Grain & Coal Company which operates at Manlius, Ill., has increased the capital stock of the firm from \$5,000 to \$25,000. L. E. Plumley is president; Jas. C. Jensen, secretary and treasurer and W. S. Stiers, and John Eddieson, directors.

SOUTHERN AND SOUTHWESTERN

The elevator of W. B. Johnson at Alva, Okla., is to be remodeled in the near future.

A grain business has been started at Levelland, Hockley County, Texas, by B. F. Gunn.

A wholesale grain, feed and flour business is to be opened at Trenton, Tenn., by J. J. Tatem.

The Yukon Mill & Grain Company of Yukon, Okla., has surrendered its public warehouse contract.

The Expansion Grain Company of Chickasha, Okla., has decreased its capital stock from \$30,000 to \$25,000.

The grain elevator of the Sessums Grain Elevator Company at Memphis, Tenn., which burned, is to be rebuilt it is reported.

A receiving house of 130,000 bushels' capacity is to be erected at Statesville, N. C., for the Statesville Flour Mills Company.

H. J. Bradfish contemplates building a concrete storage elevator at Weatherford, Texas, replacing the one which burned in June.

A new warehouse is to be built this season by the Farmers Exchange Elevator at Cashion, Okla. A new truck dump is also to be installed.

Capitalized at \$5,000, Paul T. Jackson, R. C. Newman and J. Lee have incorporated at Oklahoma City, Okla., as the Jackson Grain Company.

The Farmers Labor Union of America is to build a new grain elevator at Lindsay, Texas, which will be completed by the latter part of May.

The Cisco Grain & Elevator Company of Cisco, Texas, has been sold by H. J. Bradfish of Weatherford, to E. H. Carpenter who continues to operate it.

The building at Orange, Texas, formerly occupied by Markwith & Halcomb has been leased by the Orange Grain Company which will use it for a storeroom.

Tony Solite, J. Gascio, and Joe Savarine have incorporated at Port Arthur, Texas, as the Home Grain & Grocery Company. The firm is capitalized at \$15,000.

The grain, coal and feed business of H. H. Coppage of Mt. Sterling, Ky., has been sold by him to James E. Gay and W. E. Jones. They will operate under the name of Gay & Jones.

Additional storage of 300,000 bushels' capacity has been completed to the house of the Smith Bros. Grain Company of Fort Worth, Texas. The company contemplates still further additions.

W. J. Lawther of Dallas, Texas, operating a grain, hay and mill feed business, and Joe E. Lawther of the Lawther Grain Company of Dallas, have consolidated and will operate as the Lawther Grain Company.

The Enid Milling Company of Enid, Okla., is now an accredited public warehouse under the Federal Warehouse Act. It has a capacity of 500,000 bushels at Enid, and operates 31 elevators in western Oklahoma.

The contract has been let to the Jones-Hettelsater Construction Company by the Kimbell Milling Company of Sherman, Texas, for the erection of a 600,000-bushel elevator at Fort Worth, Texas. It will comprise 72 small bins, with average capacity of 15,000 bushels. The machinery will be of the latest type and will include two elevator legs each with capacity of 8,500 bushels. Construction work has already been started and it is hoped to have the elevator ready by the time the new wheat

moves in Texas. The company at first intended to build a 500,000-bushel house but had this plan changed adding four additional bins.

Wm. Bauer, Jr., W. A. Koonce, G. F. Dryden have incorporated at Robstown, Texas, as W. A. Koonce & Co., Inc. capitalized at \$40,000. The company will operate a grain elevator, gin and mill.

The old Farless Mill at Henderson, Ky., has been bought by Thomas Baskett, a well known grain man there. It has not been in operation for some time, but Mr. Baskett will operate as soon as the necessary repairs can be made.

MISSOURI, KANSAS AND NEBRASKA

A grain business is to be conducted at Scott City, Kan., by J. C. Mitchell.

The Princeton Elevator Company succeeds J. B. Wilcox at Princeton, Mo.

The Equity Elevator at Trenton, Neb., is to be conducted by L. E. Holmes.

The elevator at Westphalia, Kan., has been bought from Sam Tipton by the Farmers Union.

A new fireproof warehouse, 40x100 feet, has been built for the Sublette Grain Company of Sublette, Kan.

Ed Row succeeds Roy Cunningham as manager of the Farmers Elevator Company operating at Larned, Kan.

Henry Caspers is succeeded as manager of the Farmers Elevator located at Belvidere, Neb., by T. Phelps.

G. L. Mayfield is succeeded as manager of the Farmers Elevator Company at Slater, Mo., by Guy Hayes.

The Farmers Elevator & Mercantile Company at Oak Grove, Mo., has been bought by Herbert K. Roach.

The elevator of the Chamberlain Elevator Company at Maywood, Neb., has been bought by G. E. Russell.

G. W. Smith is succeeded as manager for the Chase Co-operative Union at Chase, Kan., by A. H. Riederer of Green.

The elevator which Simon Rehmeier bought at Alvo, Neb., is to be operated by him under the firm name of Rehmeier & Co.

A new leg and automatic scale operated by two motors have been installed by the Farmers Elevator Company of Holbrook, Neb.

The interest of Charles Colby in the Hutchinson Grain Company of Hutchinson, Kan., has been sold to his partner Elmer Mowery.

Capitalized at \$10,000, the Great Eastern Elevator Corporation has been incorporated at St. Louis, Mo. R. H. Adams is president.

A grain storage of 200,000 bushels, comprised of six concrete tanks, is being added by the Robinson Milling Company of Salina, Kan.

H. H. Watson has been named as successor to C. M. Fox as manager of the Farmers Grain & Elevator Company of Mexico, Mo.

The Farmers Elevator at Union, Neb., has been equipped with a new dump. It will accommodate wagon, sled and truck in unloading.

Channing Lewis has bought the elevator at Kinney, Neb., which was for years owned and operated by the Farmers Grain Company.

The elevator at Barnston, Neb., is being operated by F. J. Bahr of Broken Bow. It was formerly owned by the late William Townsend.

Possession was given on March 1 to James Lane of Hutchinson, Kan., who bought the business of Oline & Atherton at Sterling, Kan., some time ago.

The elevator at Ulysses, Neb., has been leased by the Dawson Grain Company and put into operation. Al Smith is local agent for the Dawson company.

A wholesale grain, feed and flour business is to be conducted at Baxter Springs, Kan., by B. H. Shields and his associates. The elevator will be erected later.

G. G. Mowrey is succeeded as manager of the Farmers Co-operative Union Elevator at Sterling, Kan., by W. J. Sanderson. He was formerly with the Arnold-Madaus Mill.

The grain, feed, seed and coal business of Arthur Howell at Shebina, Mo., has been bought by Edw. J. Finney, formerly manager of the Farmers Produce Company of Shebina.

A new 20-horsepower motor has been installed by the Farmers Elevator Company of Culbertson, Neb. The company is also installing a 10-inch feed grinder and one short elevator leg.

The elevator at Omaha, Neb., owned by the Merriam & Millard Company has been leased by the Trans-Mississippi Grain Company who will operate it in connection with their Council Bluffs house.

The east elevator at North Platte, Neb., has been leased by Carl Wickstrom of Hershey, Neb., from the Nebraska Mill & Elevator Company. Mr. Wickstrom has been in the grain business at Hershey for 18 years and will spend part of his time at

North Platte and part at Hershey where he retains his interest. Mr. Wickstrom will leave Mr. Long in charge of the elevator at North Platte when he is not there.

The Parsons, Kan., elevator, and flour and feed business of the Rea-Patterson Milling Company of Coffeyville, Kan., has been sold to Aldo Funston, who has been local manager there.

The elevator of the Reitz Grain Company at Waverly, Neb., has been bought by John G. Aden of the Aden Grain, Feed & Coal Company at Havelock. He will operate the house.

The New Florence (Mo.) Mill, which conducts a grain, feed and elevator business, is now controlled by W. E. Bush who has bought the interest of his brother, E. D. Bush, in the company.

Roy Cunningham is succeeded as manager for the Pawnee County Co-operative Association by Ed Row. The company operates several elevators in that vicinity with one at Larned, Kan.

The elevator and lumber yard of the Nye-Schneider-Jenks Company at Clinton, Neb., have been bought by the Clinton Grain Company of Rushville. James C. Motz will be manager.

The Producers Grain & Exchange Company has been incorporated at Lupus, Mo. The directors are W. H. Schull, W. G. Steiner, O. E. Stock, P. Dungan, J. T. Hickman, L. C. Kuhn and J. D. Byler.

The Macksville, Kan., elevator of the Gano Elevator which is known also as the Kansas Grain Company has been sold to the Kansas Milling Company. B. A. Holland will remain as manager of the elevator.

The elevator, mill and lighting plant of the Farmers Union Trading Company at Potter, Neb., have been sold to a local company for \$25,000. This company, it is said, will continue to operate the business.

A large terminal elevator is to be built at Springfield, Mo., for the Lipscomb Grain & Seed Company, adjoining its present warehouse. It will be equipped with up-to-date grain handling machinery throughout.

W. S. Yundt is succeeded as manager of the Arlington Elevator Company at Arlington, Kan., by Ed Linscheid. Mr. Yundt has been manager of the business for 21 years, but is now retiring from active business.

The Hurlburt Bros. of Utica have bought the elevator of the York Milling & Grain Company at Utica, Neb., and will take possession April 1. The new owners had operated an elevator at Utica until their house was destroyed by fire.

The Uhlmann Grain Company's new Katy Elevator at Kansas City, Mo. is to have an addition of

300,000 bushels' capacity. This addition will bring the total storage to 1,300,000 bushels. James Stewart & Co., who built the original unit, has the contract for the addition. The first unit of the Uhlmann Elevator was completed last year.

The Wyandotte Elevator Company is to be managed at Kansas City, Mo., by O. T. Cooke, Jr. He succeeds W. C. Bagley who resigned and who will devote his entire time to the management of the grain department of the Southwestern Milling Company.

A modern concrete elevator is to be built for the Teichgraber Milling Company of Gypsum, Kan., replacing the one which burned. The new house will cost between \$30,000 and \$40,000 and will have three concrete bins in addition to a modern head-house.

George Polard and others have incorporated at Malmo, Neb., as the Malmo Grain Company. The firm is capitalized at \$25,000. The company has bought out the Union Co-operative Company and will handle grain, livestock, implements, coal, and other sidelines.

The Moser-Larrick Grain Company, a partnership organized at Oberlin, Kan., in December 1923, has bought the elevator there which was formerly owned by the Stinson Grain Company. E. Moser, a member of the company, was formerly associated with the Stinson firm.

The interest of C. C. Thomas of Kansas City in the Twidale, Wright & Co., grain merchants of Kansas City, Mo., has been sold by him. Mr. Thomas has an interest in the Thomas Grain Company which is located and operating at Franklin, Neb., and he will locate there.

The Washburn-Crosby Company of Minneapolis will build a grain elevator at Kansas City, Mo., of 750,000 bushels' capacity. The new elevator will adjoin the company's mill at Kansas City. I. A. Stratton of the company's engineering department, is in charge of the work.

Wyan Nelson has bought the interests of J. W. Boyd and Preston Pate and has reorganized the Nelson Grain & Milling Company of Kansas City, Mo. With him will be associated S. T. Wildbahn, formerly general manager of the Excello Feed Milling Company, and E. L. Barr and R. N. Barnard.

The Chicago & Great Western Elevator at St. Joseph, Mo., which burned is to be rebuilt. The old elevator had a capacity of 125,000 bushels; the original unit was built in 1895 at a cost of \$54,000. Some time ago the house was leased from the railroad by F. S. Gresham to operate as the Missouri-Kansas Grain Company, and negotiations were under way for another company to take over the lease when the fire destroyed the building.

OBITUARY

BARNARD.—J. H. Barnard, a well known flour and feed merchant of Spencerville, near Prescott, Ont., died recently.

BATCHELDER.—A. Batchelder died recently at Plainfield, Vt. He was a prominent grain dealer and mill owner. He is survived by his widow.

BLACKSTONE.—J. E. Blackstone died recently aged 70 years. He had been in the grain elevator and coal business at Warren, Ill., for years.

BRUSO.—O. A. Brusio of Buffalo, N. Y., died on March 3. He was associated with a number of Buffalo grain firms and did business on his own account.

CARSON.—William Carson aged 69 years died at Calgary, Alta., on February 11. He was for years connected with the Manitoba Grain Company with headquarters in Winnipeg.

CLARK.—John F. Clark died at New Orleans, La., recently. He was a former member of the Chicago Board of Trade.

COFFMAN.—Daniel V. Coffman died on February 8 at his son's home in Denton, Mont. He was treasurer of the Farmers Elevator Company of Moore.

CROWLEY.—P. J. Crowley died on February 24 aged 60 years. He was superintendent of the Great Northern Elevator S at Superior, Wis., for 35 years. His widow, son and daughter survive him.

DEEVES.—Thomas S. Deeves, one of the oldest members of the Chicago Board of Trade, died, aged 84 years, at his daughter's home in Chicago, Ill., from pneumonia. His widow, son and daughter survive him.

DOAK.—R. J. Doak died at Millbrook, Ont., recently. Until compelled by ill health to retire four or five years ago he was in the grain business.

FEE.—John Fee died after a long illness at his home in Kokomo, Ind., aged 67 years. He was a

grain and feed dealer there. His widow and three sons survive him.

FYLLN.—Thomas Flynn, for years in the grain business at Toronto, Ont., as L. Coffee & Co., died on February 17, aged 92 years. He had been a resident of Toronto for 79 years.

GILES.—W. M. Giles died from injuries received when he fell downstairs at his home in Kansas City, Mo. He was Kansas City manager of Thomson & McKinnon, grain brokers of Chicago, Ill.

HALL.—Addison Hall, formerly with the Marshall Hall Grain Company of Des Moines, Iowa, died on February 13.

HALLIDAY.—H. Halliday, Jr., died from pneumonia on February 17, aged 27 years. He was the St. Louis representative of the Halliday Elevator Company of Cairo, Ill., and son of H. E. Halliday, president of the firm.

HOFFER.—A. H. Hoffer, formerly of Hoffer & Garman, flour and feed merchants of Harrisburg, Pa., died recently.

HOWELL.—G. W. Howell died on February 3 at Carman, Ill. He was formerly manager of the Stronghurst Grain & Merchandise Company at Stronghurst, Ill.

KRUEGER.—William J. Krueger died at his home in Evansville, Ind., where he for some time conducted a feed store. He is survived by his widow, one son and two daughters.

LAPPIN.—Frank Lappin, a well known hay dealer of Saginaw, Mich., died recently.

LITTIG.—John M. Littig died recently. He was a well known member of the Baltimore Chamber of Commerce and was for years president of the National Marine Bank of Baltimore, Md.

PHILLIPS.—Frank J. Phillips died at a hospital in Galveston, Texas, while there on a business trip. He was president of the Greenville Mill & Ele

vator Company of Greenville, Texas. His widow, four sons and a daughter survive him.

LEWIS.—Charles G. Lewis, superintendent for the Superior Feed Company of Memphis, Tenn., died leaving a widow. He was 25 years old.

PULSIFER.—Frederick K. Pulsifer, well known grain broker and stock dealer, of New York and Chicago, died at New York City on February 22. He became a member of the Chicago Board of Trade in 1881 and was a member of that organization until his death.

SCHMEHL.—Louis Schmehl died recently aged 50 years. He is vice-president of the Jenera Co-operative Grain & Supply Company located at Jenera, Ohio.

SHULTZ.—John A. Shultz committed suicide, leaving a widow and eight children. He was formerly a weigher in the Minnesota State Weighing Department at Minneapolis.

STALLSMITH.—On February 18, John A. Stall-

smith, for years in the grain and flour business at Gettysburg, Pa., died aged 74 years.

STIPP.—W. H. Stipp, a retired grain dealer and elevator owner, died at Marshalltown, Iowa, on February 29. His two sons survive him.

VICE.—Frank Vice, shot and killed himself. He was a large handler of Red Top seed at Olney, Ill.

VON ENDE.—Victor Von Ende of the Columbus Elevator Company of Minneapolis, Minn., died on February 12.

WALTON.—George K. Walton died on February 26 at Kansas City, Mo. He was formerly in the grain business and was for a number of years connected with Goffe & Carkener; for the past two years he had been in the building business. His widow and daughter survive him.

WINTER.—R. H. Winter died on February 3 aged 71 years at Milwaukee, Wis. He was formerly in the elevator business there and later was with the Petit Salt Company.

FIRES—CASUALTIES

Randolph, Neb.—Fire damaged the Jack Frost Elevator recently.

Sabina, Ohio.—A small loss was reported on the elevator of W. A. Linkhart.

Essig, Minn.—The Equity Elevator with about three cars of grain burned recently.

Erie, Pa.—The house of the Crouch Bros. Company was damaged by fire on February 9.

Fellsburg, Kan.—A storm slightly damaged the elevator of the Equity Exchange on February 2.

Nebraska City, Neb.—Fire slightly damaged the office of the Bartling Grain Company recently.

Senie, S. D.—With a loss of \$4,000, the Tom Arnold elevator and warehouse was damaged by fire.

Boston, Mass.—Fire damaged the storehouse of the Brooks Barley Company with a loss of \$3,000.

Terry, Mont.—Fire destroyed with a loss of \$25,000, the Columbia Elevator with 14,000 bushels grain.

Elizabeth, Minn.—The elevator of John Heyerholm was destroyed by fire on March 3. The loss is total.

Woodward, Texas.—The elevator of the Wheat Growers Elevator Company was damaged by fire recently.

Borton, Ill.—A total loss by fire was reported on the office of the Brocton Elevator Company on March 4.

Edgerton, Kan.—A total loss by fire occurred in the elevator of the Edgerton Elevator Company on March 5.

Deer Creek, Minn.—A small loss was reported on the elevator of the H. C. Ervin Company on February 20.

Ellsinore, Mo.—The feed and grain establishment of A. M. Link & Sons was destroyed by fire but will be rebuilt.

Huron, S. D.—The elevator of the Everett Aughenbaugh Company was partially destroyed by fire on February 15.

Windsor, Vt.—Fire destroyed the grain elevator, lumber and coal sheds of Charles Barber the latter part of January.

Juniata, Neb.—On February 15 fire destroyed the elevator of the Juniata Grain & Lumber Association with a loss of \$6,000.

Locust Grove, Okla.—A total loss was reported on the elevator of M. H. Thornton and C. B. Markham on February 29.

Bowling Green, Ohio.—A total loss by fire was reported on the elevator of the Royce & Coon Grain Company on March 3.

Auburn, Ill.—The steam boiler in the elevator here exploded killing A. Harris, the engineer, and wrecking the building.

Westby, Mont.—The Onstad Elevator with 20,000 bushels grain was damaged by fire. The loss is covered by insurance.

Stephen, Minn.—Fire on January 24 damaged the office of the Farmers Co-operative Elevator Company with a loss of \$1,500.

Verdi, Kan.—The Farmers Elevator Company suffered a total loss by fire originating from a locomotive spark on February 29.

Blaha, S. D.—The Wheeler Grain Elevator and 2,000 bushels of grain were destroyed by fire. The loss is covered by insurance.

Williamsport, Ohio.—Fire destroyed on February 16 the elevators of the C. W. Hunsicker Company and Clark K. Hunsicker. The fire originated in the

C. W. Hunsicker Elevator and spread to the other one. The loss was complete. Sparks from a gasoline engine started the blaze.

Fairfax, Iowa.—The elevator of Hatch & Brookman burned with a loss of \$10,000. The loss was partly covered by insurance.

Augusta, Kan.—A small fire occurred on February 2 in the Bosse-Marshall Elevator. Friction is believed to have caused the blaze.

Warwick, N. Y.—Fire destroyed with a total loss the feed and commission store of Roe & Anderson. Insurance amounted to \$20,000.

Wagner, S. D.—Fire on February 11 destroyed the elevator owned by J. T. Scroggs. The elevator contained stock valued at \$5,000.

Montpelier, Vt.—The four-story brick building here, one story of which is occupied by E. W. Bailey & Co., was destroyed by fire.

Bard (r. f. d. Mitchell), S. D.—Fire on February 11 destroyed the elevator here of which S. A. Smith of Mitchell is manager. There was about

HAY, STRAW AND FEED

A feed store is to be opened at Carleton, Neb., by H. W. Coleman.

A feed business is to be conducted at Stillwell, Okla., by G. C. Greer.

A feed and flour business has been opened at Friend, Neb., by Ernst Miller.

Paul Middleton of Omaha, Ark., has bought the Casey Feed Store at Harrison, Ark.

The feed business of C. C. Wolfe at Orange, Calif., has been bought by A. D. Burkett.

A feed and grocery store has been opened at Hartsells, Ala., by Fuller & Weinman.

A new feed and flour business will be opened at Granger, Minn., by Sims & A. Ludwig.

A wholesale feed business is to be conducted at Williford, Ark., by H. K. McCaleb of that place.

The feed business which J. E. Hall of Sac City, Iowa, bought from Bell & Son is soon to be opened.

A \$20,000 feed mill has been installed at Noblesville, Ind., by the Smock & Cake Milling Company.

Capitalized at \$125,000, the Alexandria Flour & Feed Company has been incorporated at Alexandria, La.

A store has been opened at Hawthorne, Calif., by the Blackie Bros., feed, seed, and fuel merchants of Inglewood.

The Ralston-Purina Company of St. Louis, Mo., feed manufacturers, has increased its capital stock from \$4,500,000 to \$6,500,000.

A feed and seed business is to be conducted at Hope, Ark., by J. E. Russell, under the name of the Russell's Feed & Seed Store.

Pool & Banks have organized at Raleigh, N. C., to conduct a wholesale grocery and feed business. C. C. Pool is president of the firm.

The interest of W. A. Patrick in the City Feed Store at Paris, Mo., has been sold by him to his two partners, Roy Post and C. Shearer.

The flour and feed department of the Ladysmith Trading Company of Ladysmith, Wis., has been sold by the company to Elmer Wise, who maintains

\$4,000 worth of grain in the elevator at the time of the fire. The cause of the fire is unknown.

Denair, Calif.—The warehouse of the Grange Company with several carloads of grain and 20 tons of coal were destroyed on February 4 by fire.

Armington, Mont.—The elevator and warehouse of J. C. Brady with 2,000 bushels wheat and some oats and barley were completely destroyed by fire.

Ardmore, Okla.—Damages amounting to \$10,000 were done to the warehouse of the Russell Seed Company which contained cottonseed and baled hay.

Cranston (Providence p. o.), R. I.—The warehouse office of the Knightsville Hay & Grain Company was damaged by fire. The company is owned by C. Sentier.

Memphis, Tenn.—The storage elevator of the Sessums Grain Company was destroyed on February 23 with a loss of \$100,000. The cause of the fire has not been determined.

Midlakes (Bellevue p. o.), Wash.—Fire destroyed a garage, grocery and feed store owned by Russell Whaley and operated by J. T. Kardong with a loss of between \$14,000 and \$15,000.

Toronto, Ont.—On February 13 fire destroyed the plant of the International Stock Food Company with a loss of \$75,000. The company's loss was \$60,000 to stock and \$15,000 on machinery.

Ellensburg, Wash.—The large warehouse of Dan Kleinberg, local and wholesale hay and grain merchant, was damaged by fire with a loss of \$14,000. The insurance carried amounted to \$10,000.

Reynolds, Ill.—Fire on February 15 destroyed the grain elevator of the Farmers Co-operative Company with a loss of \$13,000 and 6,000 bushels oats, 1,000 bushels wheat, rye and barley. The insurance was \$9,200.

Jersey City, N. J.—The Crabbs, Reynolds, Taylor Company and the Lackawana Terminal Stores suffered a loss on the frame warehouse by fire on March 2. So far as is known no loss occurred on the concrete elevator.

Attica, Mich.—On February 7 the grain elevator of Albert Miller & Co., and Guy Ridley were damaged by fire. The loss on the elevators was \$12,000; insurance, \$6,000. Probably the company will rebuild on the old site.

St. Joseph, Mo.—Fire on February 21 destroyed the Chicago Great Western Elevator owned by the Chicago & Great Western with a loss of \$75,000. No grain was in the house at the time. The railroad has made plans for rebuilding.

jobbing and retail stores in Ingram and Exeland, Wis., besides having an establishment at Ladysmith which includes an elevator.

A branch store has been opened at Winston-Salem, N. C., by A. M. Upshaw, owner and manager of the Happy Feed Store at High Point, N. C.

A new attrition mill has been installed by the Farmers Elevator Company of Sleepy Eye, Minn. The company will handle tankage, oil meal, bran, shorts, etc.

The Farmers Trading Company at Snohomish, Wash., has been bought by W. H. Halloway of Seattle. Mr. Halloway in addition will conduct a feed business.

George H. Richards and H. R. Holbrook of Pico (mail to Montebello), Calif., have bought The Pico Feed & Fuel Company. They will operate under the same name.

A large hay storage warehouse has been completed at the Vernon, Wash., plant of the Globe Grain & Milling Company, replacing the one which burned some time ago.

The interest of J. A. Christensen in the Tarkio Molasses Feed Mill at Tarkio, Mo., has been bought by J. B. Low, and the firm will be known as the Low-Christensen Company.

The J. W. Calbeck Feed Mill at Columbia City, Ind., known as the Jack Portman Mill has been bought by H. N. Guthrie. The plant will be known as the Monarch Feed Company.

Capitalized at \$30,000, the Bayles Bros. have incorporated at Seattle, Wash., to conduct a feed, fuel, lumber and sand business. The incorporators are C. Bayles and George C. Bayles.

E. A. Adamson has been transferred to the Seattle, Wash., branch of the Meinrath Brokerage Company, Chicago. He was for some time manager of the bean department of the company, and is succeeded as such by E. J. Hay.

The Consolidated Molasses Storage Company has been incorporated at Memphis, Tenn., and has bought the 1,000,000-gallon tanks of the Swift Re-

finery Storage. The company is composed of members of the Edgar-Morgan Company, Pease & Dwyer and the Royal Feed & Milling Company.

The business of the Enumclaw Feed Company of Enumclaw, Wash., has been discontinued. Mr. Howe, who has been conducting the business, will in the future run the company's mill.

To conduct a general brokerage business in feeds, merchandise, etc., E. F. Steitz Company has been incorporated at Milwaukee, Wis., capitalized at \$10,000. Ervin F. Steitz is interested.

The Union Feed & Grocery Company was incorporated at Terral, Okla., by P. C. Martin and W. H. Duncan of Terral and W. N. Hazelet of Fleetwood. The capital stock of the firm is \$5,000.

A small mixed feed plant has been erected at Crowley, La., for the Homer Trading Company. The company plans to make feed from hay and grain. An oat crimping will be installed.

To manufacture poultry feeds, C. J. Martin & Sons were incorporated at Austin, Texas. The firm is capitalized at \$20,000. C. J. Martin, C. E. Martin and L. A. Martin are the interested parties.

To conduct a feed, coal and flour business, the Watson-Hall Company of Seattle, Wash., has been incorporated, capitalized at \$15,000. The incorporators are R. F. Stewart, L. A. Watson and J. A. Hall.

A store at Tacoma, Wash., has been leased by the Hugh B. Clark Feed Company who will remodel and use it as an office and salesroom. The present building occupied by the company will be used as a warehouse and storage room.

Stephen Holland has dissolved the firm of Stephen Holland & Son, feed dealers at Hornell, N. Y. Mr. Holland was recently elected mayor of the town and he promised his constituents that, if elected, he would devote his entire time to his office.

A feed mill for the manufacture of molasses feed for horse and cattle with capacity of 4,000 bags per 11 hours per day is being erected by the Morris-town (Tenn.) Flour Mills, to be ready early in April. Poultry feed will also be manufactured.

The charter of the Grange Company at Modesto, Calif., has been renewed. The firm operates several bean and seed grain cleaning plants and handles feed, fertilizers, sprays, coal, etc. The company has offices at Turlock, Merced and Oakdale.

A new feed under the name of Raisina is being produced at the various stemming plants of the Sun Maid Raisin Growers Association. It is composed of the poorer quality of raisins not suitable for human consumption, raisin sirup and roughage.

INSPECTION FEES AT CHICAGO

An inspection fee of only 50 cents per car is to be made to members of the Chicago Hay Exchange and hay firms who have all of their receipts on the Chicago market inspected. Other requiring only occasional inspection pay \$1.25. This is a permanent arrangement and decidedly favors hay shippers to the Chicago market. There are no markets where the inspection charge is less.

NEW HAY VICE-PRESIDENT IN NEVADA

L. S. Cooper has been appointed Nevada State vice-president of the National Hay Association, succeeding H. T. Graves, of Fernley, Nev., who has been obliged to move to California because of Mrs. Graves' health. Mr. Cooper is secretary and manager of the Pitt Mill & Elevator Company, Lovelock, Nev., and has been active in Association work, even though rather new in the organization.

SWEET CLOVER IN ILLINOIS

An intensive campaign conducted by the county agent in Grundy County, Ill., has caused Sweet Clover to become an important factor in the farming of that community during the last six years. The first year, 1917, 22 farmers tried the new crop. They found the results good and this year some 12,000 acres of this legume were grown in the county, in most cases from 20 to 30 acres a farm.

SOY BEAN MEAL AS FEED

Hog feeders see in soy bean meal a valuable protein feed supplement because of its high protein content. It has been recommended that a mineral supplement be used when soy bean meal is fed with grain to pigs that do not have access to pasture or hay. In some cases where tankage is fed in addition to or in place of soy beans in field feeding, the gain has been more rapid and more economical.

IDAHO ALFALFA QUARANTINED

The Supreme Court of the State of Washington has handed down a definite ruling against the transportation of Alfalfa from quarantined districts of Idaho into the State of Washington. Mark A. Means, Commissioner of Agriculture, says the decision is of vital importance to Idaho because it prevents the shipping of southern Idaho Alfalfa into the northern part of the state and also excludes the Idaho product from Washington markets.

The decision was handed down in a case brought by the state for an injunction against the Oregon-

Washington Railroad & Navigation Company to prevent that company from accepting Alfalfa from the quarantined districts of Idaho.

Charles L. Robinson, supervisor of horticulture in Washington, who informed Mr. Means of the decision, also said that he had been informed the railroad company intended carrying the case to the Supreme Court of the United States.

WHEN TO CUT TIMOTHY AND CLOVER

In connection with the recommendations made by the Department of Agriculture regarding the Federal hay grades, the Department states that the time of cutting for the production of No. 1 hay is important. Neither Timothy nor Clover should be cut later than full bloom to meet the requirements of U. S. No. 1 grade. Mixtures of Timothy and Clover to meet the requirements of the U. S. No. 1 grades for Clover mixed hay should be cut when the Clover is in full bloom or not later than when half the Clover heads have begun to turn brown.

SUCCESSFUL WORK COMPLETED

The work of standardizing hay grades and establishing Federal inspection throughout the United States, which Maurice Niezer set out to do last October, has been completed and he has returned to his own business at Fort Wayne, Ind., which he laid aside at the request of the Department of Agriculture to come to Washington. Mr. Niezer had the confidence of the entire hay trade when he accepted the rather difficult task of compiling a set of hay grades which would be practical and acceptable to the hay trade in general, and this confidence has been more than justified. After weeks of study and labor, a set of rules and standards were established which were offered to the trade at a general conference called by the Department of Agriculture at Washington on January 22, and which were unanimously approved of by the large delegation present.

As a mark of appreciation the Hay Inspection Service staff of the United States Department of Agriculture had Mr. Niezer as their special guest on February 23 and presented him with a testimonial at that time as follows:

We of the Bureau of Agricultural Economics, United States Department of Agriculture, who have worked in close association with you the past five months in the standardization of hay grades, desire to express to you, at this time, our full appreciation for the privilege we had of working with you and for the substantial service you have rendered the Bureau, the hay trade and the hay producers of the United States.

In your work with us you have contributed greatly to the development of a genuine spirit of co-operation between the Department of Agriculture and the hay trade interests of the United States; you have contributed many sound and constructive ideas to the standardization of hay grades; and above all, your methods of work have set a standard for straightforwardness, fair play, equity and common sense worthy of emulation by all men interested in the betterment of the hay trade of the United States.

Not only have we enjoyed our work with you but we have enjoyed also the sunshine and the radiant good will of your personality. We wish you "bon voyage" on the vacation trip that you and Mrs. Niezer are soon to commence and we place with you our best wishes for your future success and happiness.

The entire hay trade of the country joins the Department of Agriculture in its appreciation of Mr. Niezer's conscientious and effective work and wishes him great success as he takes up the reins once more of his own business at Fort Wayne.

ORGANIZE FEED CONFERENCE BOARD

The College Feed Conference Board was recently organized at a meeting of the representatives in New York City of the agricultural colleges of 12 eastern states for the purpose of promoting greater efficiency and uniformity in the service rendered by the colleges in feeding problems. H. B. Ellenberger of the University of Vermont is chairman of the board, and E. S. Savage of the New York State Agricultural College, secretary.

Those present approved of the principal of a public formula for all ready mixed feeds when properly adjusted to meet the needs of dairymen and poultry men in the different sections of the country and favored the recommendation that buyers be advised to purchase feeds on the basis of digestible nutrients, rather than on a basis of total nutrients.

Formulas to meet the five analyses for dairy feeds as follows:

| | Minimum protein, per cent | Maximum fat, per cent | Maximum fiber, per cent |
|-----------------------|---------------------------------|-----------------------------|-------------------------------|
| Dairy feed No. 1..... | 32 | 5.0 | 9 |
| Dairy feed No. 2..... | 24 | 5.0 | 9 |
| Dairy feed No. 3..... | 20 | 4.5 | 9 |
| Dairy feed No. 4..... | 16 | 4.5 | 9 |
| Dairy feed No. 5..... | 12 | 3.5 | 9 |

were adopted. In connection with the dairy feeds it was resolved that each formula should con-

tain 1 per cent of steam bone meal, 1 per cent of calcium carbonate which will pass through a 20-mesh sieve, and 1 per cent of salt.

Chairmen were selected for the territory which was divided into three districts as follows: No. 1 including the six New England States, H. B. Ellenberger, No. 2, including New York, New Jersey, Michigan, Ohio and Pennsylvania, E. S. Savage, No. 3, including Delaware, Maryland and Virginia, J. A. Gamble.

ST. LOUIS HAY MARKET

BY W. F. WALTER

A fair demand existed all through the past month for the better grades of hay, while lower grades were hard to move unless at discounts. Receipts exceeded previous period with Timothy predominating and better quality all around was noted. Straw receipts were very light and readily disposed of. Millfeeds again were a disappointment to the trade. The demand was very dull and despite the fact that mills were running only on part time, values took a decided drop during the past month and unless some unforeseen factor looms up, the trade feels no improvement can be looked for in the immediate future.

LOWER GRADES LOOK FOR MARKET

Receipts of the lower grades of Clover and Clover Mixed hay continue greatly in excess of the demand, says the Samuel Walton Company of Pittsburgh, under date of March 7. It does not seem to be a question of price, but of obtaining somebody who will use this quality of hay. We would advise shippers to keep this quality of hay away from our market. Strictly choice No. 1 Clover and Clover Mixed hay are being disposed of promptly at satisfactory prices, although the demand is not urgent. We are experiencing a somewhat better demand for the better grades of Timothy hay, such as good No. 2, Standard, and No. 1 Timothy.

Receipts of straw have increased, with the demand not so urgent and lower prices prevailing. Receipts of packing hay have also increased, with lower prices prevailing, and only the best grades receiving consideration.

MILLFEED IRREGULAR IN NEW YORK

BY SPECIAL CORRESPONDENT

Surveying the feed market in its broadest aspect it must be admitted that conditions during the month have been exceedingly unsatisfactory to almost all concerned. There has been a scarcity of buyers nearly all the month.

Early in the month the offerings of wheat feed became heavier and with nearly all buyers holding aloof prices were lowered to stimulate business but unfortunately this decline oftened failed to have the desired effect. The tendency among buyers to hold back was partly attributable to the ample supply here of feed from Argentina and Canada. It was said that the Argentina feed was available at \$27 per ton on dock or in store and naturally this compelled holders of western bran or middlings to lower prices of feed per ton or to \$31 while a good many buyers were making few bids over \$30.75. Afterwards the reduction in cost finally induced numerous buyers to display more interest and hence there was more steadiness with a small part of the decline recovered. Brokers and receivers claim that conditions have been bad for the miller and shipper and notably in the Northwest as wheat receipts were lighter and cost higher. Meanwhile it was difficult or impossible to sell flour at a profit.

Owing to the heavier receipts of corn at western points and the big addition to the visible supply, the cost of corn was reduced which enabled millers to grind more freely and consequently corn products were offered lower leading to moderate dealings. As to cottonseed meal the position has been unsatisfactory as it has been uncommonly difficult to make noteworthy sales even at a lower cost. The fact is demand from feeders was not only slow but there was almost no inquiry from makers of fertilizers, indeed there was said to have been re-selling as it was alleged to have been possible to replace cottonseed by-products with other ammoniates at lower figures.

Later in the month there came a transformation, weakness being succeeded by greater firmness. This was not ascribed to any essential improvement in the demand but chiefly to a falling off in the offerings. It was the consensus that this reduction was largely caused by placing of a big producing concern in the South in the hands of a receiver. There was also weakness in linseed meal early which said to be due to the fact that numerous jobbers or distributors had more stock than warranted and when they became tired and in a hurry to get rid of their burden prices fell. Afterwards or when the bulk was disposed of selling pressure ceased and this led to a stronger feeling. Linseed meal was also weaker early as demand was slow and offerings abundant but subsequently supplies were reduced and a sharp rally ensued.

On the whole beet pulp was the only description that ruled stronger during the entire month not



because the demand was particularly brisk but largely owing to much lighter stocks. It was the consensus that domestic producers had marketed virtually all their surplus and had little for sale and naturally asked higher figures for the meagre supply left. Naturally this led to more inquiry for imported which was also in lighter supply. Of course as the season is about over no important business is anticipated.

Toward the end of the month members of the feed trade were puzzled and disturbed by the reduction of the import duty from 15 per cent ad valorem to 7½ per cent which means approximately a decline on the present basis of \$1 per ton—some assume that it will keep prices here down occasionally because it might naturally lead to bigger importations of feed from both Canada and Argentina into this country.

"ALFALFA" WATSON DIES

Alfalfa was not always the accepted feed that it is today, and the death of the man who started raising Alfalfa on a commercial scale brings to mind some of the difficulties and the romance too which attended the development of Alfalfa raising in our country.

H. D. Watson died at Omaha, Neb., aged 77 years, a wealthy man, and known all over as "Alfalfa" Watson. He had emigrated to Nebraska in 1882 and started his experiments, which cost him close to \$600,000, in raising Alfalfa on the semi-arid land of that section of our country.

His first Alfalfa crop of 3,000 tons rotted in his stocks because no one believed it fit for feeding purposes. The year following he sold his crop to a sheep man for \$3 a ton and threw in hay from old stocks for good measure.

But after several unsuccessful adventures to introduce Alfalfa, his luck turned and he died knowing success, and recognized by all as the one who had persevered in bringing Alfalfa into the front ranks as a feed.

KANSAS CITY HAY MARKET

BY B. S. BROWN

The Alfalfa market is strong on good dairy hay, which sold on March 6 as high as \$30 a ton, but very little of this variety is reaching the market, due to a short crop. The big movements in Alfalfa from the extreme western states is over for this season, as prices went too low to justify further shipments from that territory. It is the general opinion that the Alfalfa market will remain about stationary through the month of March.

The receipts of Timothy have been more liberal recently and the market is quoted as steady to easy. Top grades are selling from \$20.50 to \$21. Low grades are selling around \$13.59 to \$16.50. There is not much Timothy left in the country, and it is not thought that the market will decline to any great extent on tame hay for the balance of the season.

Prairie hay is holding up fairly well and the upper grades are in active demand around \$14 to \$15. It is thought that there is considerably more Prairie hay stored in the country than there was at this time a year ago. Indications are that Prairie hay will sell lower later in the season this year, than it did last year.

EASTERN FEED MERCHANTS MEET

Unusually good attendance, interesting and valuable talks at business sessions, and high class entertainment marked the mid-winter meeting of the Eastern Federation of Feed Merchants at Binghamton, N. Y., on February 21 and 22.

After the meeting was called to order by President W. S. Van Derzee, Fred Banks, president of the Binghamton Chamber of Commerce made the address of welcome, and Frank C. Jones, secretary of the association responded.

At the afternoon session Charles L. Carrier of Sherburne, N. Y., the first president of the old Tri-State Association, gave an instructive talk on "Theorists in Government" in which he stressed the tendency of the Government to theorize and meddle with the legitimate business. At the open meeting which followed this talk, the dealers and manufacturers discussed many of their problems including one led by L. F. Brown, secretary of the American Feed Manufacturers Association, on the "Open Formula."

The Friday morning session was opened by Albert J. Thompson of Wycombe, Pa., president of the southeastern Pennsylvania Feed Merchants Association, who spoke on "What Has Played Hob With the Feed Business." He said that three important phases have a direct bearing on this question: Co-operative buying, the condition of the dairy industry; and methods both good and bad in the industry itself, and developed these three phases in a most competent manner.

This address was followed by one given by Mr. Fee of the Department of Farms and Markets of the State of New York, which contrasted old time ways of feeding with modern methods. He said that the increased use of by-products had opened a way for deception and adulteration; he touched upon the lack of uniformity of statutes now found

in the several states; and discussed the irregularities in the enforcement of the feedingsuffs law.

Secretary Quinn followed with a brief discussion of present day legislation and warned the dealers in his presence to use their efforts in checking the radical legislation now in Congress.

The last address on the program was given by O. E. M. Keller of the Arcady Farms Milling Company of Chicago, and president of the American Feed Manufacturers Association, who gave an illuminating talk on co-operation between feed merchants, which is reproduced in full elsewhere in this issue.

NEW FEED BRANDS

"CREMO" yellow corn chop, soft wheat bran, soft wheat mill run, mixed feed, soft wheat shorts, hog feed, Alfalfa molasses feed, horse and mule feed, hen scratch, chick scratch, laying mash, cream meal and cornmeal. Holland-O'Neal Milling Company, Mount Vernon and Springfield, Mo. Filed October 12, 1923. Serial No. 186,905. Published February 12, 1924.

"GOOD GOODS" wheat flour, grains and feed (for poultry and other livestock). J. H. Wilkes & Co., Inc., Nashville, Tenn. Filed July 9, 1923. Serial No. 183,015. Published and registered February 12, 1924.

"TAISTI MASH" agricultural animal food for cattle, swine and poultry. Universal Products Sales Company, New Brunswick, N. J. Filed April 12, 1922. Serial No. 162,221. Registered and published February 12, 1924.

"FANCY TEXAS RED RUST PROOF" cattle feed. Embry E. Anderson, Memphis, Tenn. Filed August 13, 1923. Serial No. 184,375. Published February 12, 1924.

"MILL STREAMS" whole wheat flour, buckwheat flour, rye flour, Graham flour, cornmeal, laying



"TAISTI MASH" DANDY CREMO

mash, scratch feed, hog feed and bread. Winchell Smith, Farmington, Conn. Filed April 13, 1923. Serial No. 179,336. Published February 12, 1924.

"DANDY" chicken and poultry feed, viz., scratch food, chicken food and laying mash. Taylor Bros., Camden, N. J. Filed April 20, 1923. Serial No. 179,439. Published Feb. 12, 1924.

"SUPERIOR" horse, cattle, and poultry feeds, and grains. Flory Milling Company, Bangor, Pa. Filed October 11, 1923. Serial No. 186,834. Published February 26, 1924.

"GOOD GOODS" poultry, horse, dairy, grain and mill feeds and wheat flour. J. H. Wilkes & Co., Inc., Nashville, Tenn. Filed July 7, 1923. Serial No. 182,947. Published March 4, 1924.

"AMCO" feed. American Milling Company, Peoria, Ill. Filed January 17, 1924. Serial No. 190,904. Published March 4, 1924.

"EASTERN STATES" feed for cattle and poultry. Eastern States Farmers Exchange, Springfield, Mass. Filed October 19, 1923. Serial No. 187,210. Published March 4, 1924.

Trademarks Registered

178,084. Cow, horse, mule and hen feed. Percy W. Owen, doing business as Southern Feed Company, Birmingham, Ala. Filed May 11, 1923. Serial No. 180,489. Published October 23, 1923. Registered January 8, 1924.

178,804. Stock and chicken feed. International Milling Company, Minneapolis, Minn. Filed February 21, 1923. Serial No. 176,408. Published October 30, 1923. Registered January 29, 1924.

178,861. Wheat flour and stock feeds. Capital City Milling & Grain Company, St. Paul, Minn. Filed February 10, 1923. Serial No. 175,845. Published November 6, 1923. Registered January 29, 1924.

178,990. Poultry foods, namely, poultry mash, scratch foods, growing food and developing food. Fred D. Wikoff Company, Red Bank, N. J. Filed February 21, 1922. Serial No. 159,675. Published November 6, 1923. Registered February 5, 1924.

179,185. Cattle and poultry feed. Pease & Dwyer Company, Memphis, Tenn. Filed November 29, 1921. Serial No. 156,058. Published November 13, 1923. Registered February 5, 1924.

178,784. Cereal scratch and chick feed for poultry and cereal feed for hogs. Charles O. Sandefur, do-

ing business as Sandefur's Cereal Mill, Owensboro, Ky., assignor to Anglo-American Mill Company, Owensboro, Ky., a corporation of Delaware. Filed May 7, 1923. Serial No. 180,301. Published October 30, 1923. Registered January 29, 1924.

179,243. Feed for livestock. Sweetwater Cotton Oil Company, Sweetwater, Texas. Filed June 2, 1923. Serial No. 181,502. Published November 6, 1923. Registered February 5, 1924.

179,284. Cornmeal, wheat flour, prepared dietetic flour, pearl barley, hominy grits, poultry feeds and stock feeds. The Quaker Oats Company, Chicago, Ill. Filed June 7, 1923. Serial No. 181,646. Published November 13, 1923. Registered February 5, 1924.

179,380. Dairy and horse feed. Tri-State Vegi Feed Company, Cincinnati, Ohio. Filed June 25, 1923. Serial No. 182,451. Published November 13, 1923. Registered February 5, 1924.

179,459. Stock and poultry feeds and mashes. Universal Mills, Fort Worth, Texas. Filed May 2, 1923. Serial No. 180,190. Published November 20, 1923. Registered February 12, 1924.

179,460. Stock and poultry feeds and mashes. Universal Mills, Fort Worth, Texas. Filed May 2, 1923. Serial No. 190,089. Published November 20, 1923. Registered February 12, 1924.

179,465. Horse and mule feed. Louisville Cereal Mill Company, Louisville, Ky. Filed May 28, 1923. Serial No. 181,291. Published November 10, 1923. Registered February 12, 1924.

179,446. Oats for use as stock feed. Embry E. Anderson, Memphis, Tenn. Filed February 10, 1923. Serial No. 175,835. Published November 20, 1923. Registered February 12, 1924.

179,450. Oats for use as stock feed. Embry E. Anderson, Memphis, Tenn. Filed February 10, 1923. Serial No. 175,837. Published November 20, 1923. Registered February 12, 1924.

FEEDS AS ELEVATOR SIDE LINES

BY E. C. DREYER

The statement was recently made by the editor of the AMERICAN GRAIN TRADE that the success of the country grain dealer depends largely on the side lines which he is carrying in addition to his grain business. He is certainly correct and I can only add that I heartily agree with him in this. I have advocated this very feature at all times.

There are several reasons for this. In the first place, under present economic conditions very few country elevators can depend entirely upon the handling of the farmer's grain and make a profit out of it. His overhead would eat him up. Some years back, this was possible but in the present day of keen competition it is almost an impossibility.

It is a known fact that grain dealers and their allied interests such as the manufacturers of flour or feeding stuffs are working on the closest margin ever known in history, notwithstanding the fact that there has been a lot of false propaganda spread as to the exorbitant profits that are and have been made by the handlers of cash grain and its by-products. Figures will prove that the handler of these products not alone assumes a greater risk but make a great deal smaller percentage of either gross or net profits than that of any other known industry.

It has been proven that the feeding of crushed grain is by far more beneficial or in other words, brings better results than the feeding of raw whole grain. Corn is being utilized today for more different purposes than ever heretofore known with a new usage being found almost each succeeding year. The production of corn sugar is on the increase and promises to become a tremendous industry. It is also a proven fact that scientific and properly blended feeds are of more value in the feeding of stock than any whole or raw grain. The dairy interest of this country is likewise increasing. The majority of farmers throughout the central and western states are today producing milk, butter and other dairy products. The population of the country is also increasing to quite an extent.

Such products as linseed oil meal, cotton seed meal, wheat bran, gluten feed, wheat shorts are known to be extremely good feeds and in addition to this, there are now any number of mixed feed manufacturers who are putting out scientifically prepared feeds for almost every purpose.

We have in all states, experimental stations in charge of competent feed control officials who as a rule co-operate with the agricultural colleges within the states and who are doing everything in their power to check up the analysis and guarantees of the various feeds now on the market, hence insuring to the farmer only honest feeds.

Now in the face of all of this, it is my belief that a country elevator can not alone be of great benefit to his community, but likewise the farmer, by inducing the farmer to sell his raw grain and in turn feed properly balanced rations. In the old days there was a theory that corn could be fed to most any animal with good results and it was only a few years back that a feeder of stock for market purposes thought there was no such feed that could compare with corn. Today the intelligent feeder will sell his corn and feed-cotton seed meal or other high concentrates especially when the price of corn

is about equal that of cotton seed meal, by reason of the fact that he can fatten his cattle in a great deal shorter period of time on cotton seed meal and as a consequence, save himself quite a little money in this manner.

It is therefore my belief that the country elevator should handle a complete line of feeds and should assist the agricultural colleges in educating the farmer or feeder into the usage of proper feeds and in this way he will likewise be helping himself by reason of the fact that he will still be handling the farmers grain and in turn sell the farmer various feeds. While this not alone will prove mutually profitable, he will also be assisting in bringing down the cost of living to a great extent.

There is no question but what a great deal of grain is wasted each year. The farmer feeding raw grain is oftentimes not alone fooling the animal but likewise himself, where if this grain came to market and entered into the proper channels for which it is best intended, it would mean that there would be an increased production of offal from this grain, thereby enabling the farmer to sell his grain on a profitable basis and purchase a substitute for his own use at a great deal lower cost to himself. The country elevator can render a greater assistance alone these lines than most anyone and I trust that he can be awakened to this fact.

CUTTING ALFALFA HAY

The University of Nebraska Agricultural College in an article on cutting Alfalfa for hay recommends the starting of new growth of Alfalfa at the crown and lower parts of the old stems. Should the season be dry, the new growth will be slow in starting, and the Alfalfa will be in full bloom, while if it is a wet season, the new growth will start earlier, or when the first blooms appear.

"Cutting the Alfalfa at just the time the new growth starts gives the plants the best chance to compete against weeds of all kinds and also keeps the ground shaded the greatest percentage of the time," according to the college. "By delaying the cutting of the crop until it is nearly in full bloom, however, a larger yield will be obtained over a period of years, and the life of the stand prolonged.

"Cutting the crop late in the fall so that not enough growth is left for protection during the winter also has much to do with thinning the stand, and it is recommended that Alfalfa be given time to reach a height of six or eight inches before cold weather shuts off the sap flow.

"The growing of Alfalfa in rows in dry regions was recommended in the past, but experimental evidence gathered in the last few years shows that this method is seldom practical.

"Accumulating experience also has exploded some old notions about the value of cultivation of broadcast stands. It has been found that harrowing a field of Alfalfa ordinarily does not increase the yield, nor does it prolong the life of the stand to any noticeable extent. If weeds and grass work in and reduce the stand, it is better to plow up the field and put in another crop for a year or two."

GRAIN SCREENINGS AS FEED

Canadian feeders are outgrowing their lack of confidence in cleaned grain screenings for feed and are using increasing quantities of it, says George H. Clark, commissioner of the Dominion Seed Branch.

This condition is attributable to several factors—the Feeding Stuffs Act with forces removal of deleterious weed seeds and of chaff and dust; the introduction into mills and elevators of improved grain and screenings cleaning machinery; the classification and standardization of screenings, and a wider recognition on the part of the trade that the proper cleaning and grading of this material is essential to the establishment of a ready and steady market.

There is one class of grain cleanings standardized by the Board of Grain Commissioners and sold under the name "Oats Scalpings" that has not as yet found a wide market in Canada but which is increasing in popularity and demand as it becomes better known. The average sample weighs from 36 to 38 pounds per bushel and consists of from 50 per cent to 75 per cent of wild oats with a total from 70 per cent to 90 per cent of wild oats and domestic oats combined. The remainder is made up of wheat, barley and other coarse grain recovered along with the oats and wild oats, in the process of cleaning the wheat. It is evident, therefore, that for utility purposes oats scalpings are comparable with the feed grades of oats.

The principal objections of feeders to screenings are the lack of uniformity as between different shipments and the danger of spreading noxious weeds. Oats scalpings, however, vary but little in composition except in the proportion of oats to wild oats, any increase in the percentage of the former usually being balanced by a corresponding decrease in the percentage of the latter. Furthermore, unlike most other classes of screenings, oats scalpings are practically free from fine weed seeds, hence excessively fine grinding, entailing high power and special machinery, is not so necessary as with the other classes. An additional advantage is that oats scalp-

ings either whole or ground may be obtained at the flour mills as well as from the elevator, particularly at those mills of large capacity which are equipped with modern cleaning and grinding machinery.

SUCCESS WITH RED CLOVER DEPENDS ON MANY FACTORS

A successful stand of Red Clover depends on a number of factors, the absence of any one of which may seriously affect the crop. A simple test to determine the needs of the soil on the farm or in the field where it is desired to grow Clover may be made by setting aside a small plat of ground in the field for experimental purposes and trying different treatments of the soil as regards lime, fertilizers, etc.

An arrangement of a series of eight plats for such a test is suggested by the United States Department of Agriculture. The strip of land to be used for the test should be as near representative of the field as is possible to determine from superficial observation. Divide it into eight plats of equal size. Leave the first plat untreated for a check on the treated plats. On the second spread lime alone, on the third lime and phosphate, on the fourth lime and manure, on the fifth manure alone, on the sixth manure and phosphate, on the seventh phosphate alone, and leave the eighth untreated for another check.

By this arrangement all of the lime and all of the manure can be applied to the experimental plat in one continuous area. The phosphate alone must be applied to separate areas, and phosphate is the easiest to apply. A ton of ground limestone and 250 to 300 pounds of 16 per cent acid phosphate per acre is suggested unless the land is known to be very poor in lime, when 2 tons of ground limestone may be applied. In this outline no potash has been suggested. Potash plats can be inserted if desired, but over most of the Clover area scarcity of phosphate is much more common than scarcity of potash, and by following the outline suggested here the farmer is likely to find which fertilizer is best to use. This outline illustrates the principle of definite experimentation and can be varied to suit the kind of information wanted. One or more check plats to which nothing is added and which receive only the same treatment as the main field must always be left for definite comparisons.

HAY DULL IN NEW YORK

BY C. K. TRAFTON

There were practically no essential changes in the hay situation in this market early in the month although prices were somewhat lower. Practically all receivers and distributors were complaining bitterly over the discouraging developments, saying that it had been extraordinarily difficult to accomplish anything in the way of important business as they had found buyers singularly indifferent being only willing to manifest limited interest in good to choice grades of Timothy or Light clover mixed. Even then buyers have almost invariably refused to negotiate for round lots to arrive unless sellers were willing to make concessions on cost. Unfortunately little could be consummated because there was no pressure to sell superior grades for the excellent reason that receipts of best descriptions had continued small. A large percentage of the hay arriving was of common or inferior quality in part from Canada. Some of this hay was so poor that it was virtually unsalable notwithstanding the fact that it was freely offered at uncommonly low figures.

This created an exceedingly bad situation, one that was the source of unprecedented irritation, bewilderment and loss of time as well as money. Some conception of the peculiar and distressing state of affairs may be formed from the fact that in numerous instances it was found necessary to name such low prices on inferior grades in order to get rid of them that not sufficient was realized to equal freight, demurrage and other charges.

In some cases drafts were not taken up owing to the fact that the hay was unsalable—on account of poor quality—to counterbalance charges. Obviously all these obnoxious and distressing developments served to create a situation that was highly unsatisfactory to everyone concerned. As frequently stated in previous reviews it unquestionably looks like an exceedingly poor not to say foolish business policy to continue to send such inferior trash to this or practically any seaboard market but this is particularly true of the especially big cities where there are few if any cattle, etc., to be fed and as often pointed out feeders of horses can rarely if ever be induced to even look at hay which is not strictly good to choice. Hence it frequently occurs that even receivers of No. 3 that is not really the top of the grade nearly always find it virtually impossible to effect sales excepting at a material discount compared with better qualities. Naturally the outcome of all these developments was conspicuous irregularity and unsettlement.

Late in the month there was a change in the temper of the market, depression being followed by more firmness and notably on the superior descriptions. This was largely traceable to the fact that

receipts have diminished and stocks have been appreciably reduced and buyers have found it necessary to make more negotiations for forward shipments from the country.

In the meantime farmers and country shippers have manifested great unwillingness to sell unless at higher figures claiming they had lost money on virtually every car they shipped to the East in a month or more and notably of course on the low grades. As a result of the developments described No. 1 Timothy in big bales advanced from \$29 at the outset to \$31; it was averred that a few cars of extra choice had commanded as much as \$32 in Brooklyn, as a large percentage of the hay came via N. Y. Central. Because of the scarcity and higher cost of No. 1 buyers turned their attention more to No. 2 which went as high as \$27 to \$28 for the best lots against \$26 to \$27. Meanwhile No. 1 Light Clover Mixed rose from \$27 to \$29; indeed a few sales were reported as high as \$30.

Nothing of decided importance occurred in the straw market demand being still inactive but as receipts were light prices remained almost unchanged, No. 1 rye ranging between \$20 and \$21.

COOPERATION IN THE FEED BUSINESS

[Address given by O. E. M. Keller at the recent mid-winter meeting of the Eastern Federation of Feed Merchants.]

The keynote of the little I have to say revolves about a word that practically every man here has had burned into his life and existence and records the last three years. While you who attend meetings like this are repaid over and over, it is unfortunate that those who most need the contact, education and information are usually those who do not attend.

Now to get that word that has been burned in your hide the last few years—that word is "co-operation." I say that a little thought, study and analysis and action on your part will turn that word from an apparent curse into a Godsend. And furthermore, I said that the nailing of that word to the masthead and its free use will help you work out your future problems, as well as those of the moment. There are three major "co-operates" in the life of every feed dealer.

First, inasmuch as selfishness is man's prime motive, we will start with the most selfish "co-operate"—that of co-operating with your customers and prospects and possible customers—the feed dealer in some parts of the East has been very much in the position that the railroads and packers were in three or four years ago. You did not take the public enough into your confidence and in the time of their distress they therefore figured you were robbing or had robbed them, and as a consequence, tried to find ways to beat it.

Fortunately, the method of dealer distribution of feeds is economically sound and farmers' organizations have come to realize and recognize it in different ways, but you, as dealers, can learn a lesson from the past if you will co-operate with the consumer. Recognize the fact, as do we manufacturers, that over the period of your business life you prosper only as your customers prosper. You may get a step ahead of them on the prosperity wave but a period of years will average out. So to co-operate with your customers means serving them—and serving them means helping them to make money—and any time the spirit is abroad in your community that you always help them make money, you sure are going to be on an equal basis and get an equal chance with any new thought that may come along disturbing the order of things.

The successful feed dealer of today is not a warehouse man any more, he has got to be a merchandiser who not only co-operates and gives service but also lets his world know that he is co-operating and giving service and doing it economically, and that he is only getting a return commensurate with the service rendered—more and more is business telling the public what it costs to do business and what profits it is making.

I would say the first step in this direction would be a knowledge of the cost to do business. Your business is justified, therefore its expense is justified, and if particular expense is sound and in line with that of your line of business, you can justify it without apology to the public. Knowing your total cost of doing business, and your present volume, your cost per unit is easily determined, and then that cost per unit should be obtained and speculation should not be relied upon to make up the deficit created by selling certain commodities below the actual cost of distribution.

The fundamental policy of most manufacturers is to work on the basis of replacement cost or, in other words, on the market. We know our average per ton cost over a reasonable period and that, plus a profit, is added to the market price each day. Your business should be run likewise and there should be a fairer balance and a closer parity between what you add to raw materials and what you add to mixed feeds. If it costs you 10 per cent to do business, it is not right nor good business on your part to add only 5 per cent to bran and add 15 per cent to mixed feeds—because

(Continued on Page 647)

FIELD SEEDS

THE U. S. SEED TESTING LABORATORIES

The United States Department of Agriculture seed testing laboratories during the fiscal year 1923 received and examined 27,370 samples of seeds. Of these 13,755 came to the Washington laboratory and 13,615 to five branch seed testing laboratories maintained in co-operation with state institutions.

The study of the characteristic weed and other seeds occurring in crop seeds grown in different localities in the United States and in foreign countries has been continued and the results will soon be published.

SEED BILL INTRODUCED

Senator Capper has reintroduced in Congress the bill authorizing the registration of seeds and authorizing the Secretary of Agriculture to investigate and promote methods for seed improvement; to determine the quality and varietal purity of any seed offered for sale in the United States and to publish the findings; and to fix, establish and promulgate standards and requirements for the quality and varietal purity of seeds, such standards and requirements to be known as the Federal Standards and Requirements for Registered Seed.

CLOVER SHOWS IMPROVEMENT

Cash demand for Clover seed shows more improvement, say C. A. King & Co. of Toledo in a recent letter. If weather would open up believe our stocks of Clover here would meet a more active demand. This demand will have to improve however, before shorts in March will have to worry. Stocks here are less than our September 1 carry-over last year so that our stocks are not burdensome to say the least. Don't forget that October seed is absolutely domestic grown, while new domestic prime is selling here at around \$2 per bushel premium over October.

NOXIOUS SEEDS IN INDIANA

Under the new Indiana seed law, the following 18 varieties of seeds are classed as obnoxious: Buckhorn, bracted plantain, Canada thistle, chicory, common plantain, corn cockle, curled dock, dodder, horse nettle, mustard, oxeye daisy, prickly lettuce, quack grass, red sorrel, white top, wild carrot, wild garlic or onion and yellow trefoil.

These 18 varieties are divided into three classes—the annual, which grows up and dies down root and all each year. The biennial plants of two years' duration. And the perennial, the root of which lives for more than two years.

CHEMICAL STIMULATION FOR SEEDS

Considerable success has been attained by Metodi Popoff, called the Luther Burbank of Bulgaria, in increasing grain crops by the use of chemically treated seeds. In an experimental area the wheat yield was increased from 180 to 312 kilograms and rye from 218 to 279 kilograms. A rice crop was increased from 190 to 490.

Prof. Popoff explains the stimulation of the seeds does not deprive them of germinative powers and points out that second crops have shown the same stimulative effects.

His method has been adopted in Germany, Czechoslovakia and Hungary with results, it is said, similar to those achieved in Bulgaria.

DEPARTMENT EXPERIMENTS DISCREDIT CLAIMS FOR ELECTRICALLY-TREATED SEED

Claims made by some investigators that treating the seed of small grains with electricity increases the yield have not been substantiated by results of experiments by the United States Department of Agriculture. A process patented and brought into use in England in 1917 under the trade name "Wolfryn Electrochemical Process" has been well advertised in that country, Canada, the United States, and Australia. The process consists in subjecting the seed grain to an electric current (D.C.) passing through a conducting solution in which the seed is immersed. Some reports indicated that this electrochemical treatment increased the yield 20 to 30 per cent and reduced the losses from bunt, rust, and wireworms.

The experimental methods adopted by the United States Department of Agriculture to determine the value of such treatment and the results obtained have just been published in Department Circular 305 which is now ready for distribution. The investigators conclude with the statement: "Data obtained from replicated plats of Winter wheat harvested at the Arlington Experiment Farm in 1921 and 1922 showed no benefit or profit resulting from treating the seed electro-

chemically by the so-called 'Wolfryn' process. Grain yields from all plats sown with electrochemically treated seed averaged 1.1 bushels per acre less than yields from plats sown with untreated seed. No effect of the treatment on plant growth or disease infection could be observed."

A copy of the circular may be secured, as long as the supply lasts, from the United States Department of Agriculture, Washington, D. C.

WYOMING SEED CORN LAW

The Wyoming Seed Corn Law requires that all seed corn offered for sale in that state must have a purity test of 99 per cent and a germination test of 85 per cent. Seeds recently received by A. R. Smith, dairy and food commissioner there, have proved to be below standard, not one tenth having passed the test, and nearly all testing under 50 per cent germination.

This condition has led officials to take greater precautions in enforcing the law, so that Wyoming seed growers may be more fully protected.

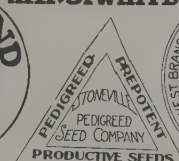
This poor quality of seed is probably due to the fact that the cold weather followed close upon the rainy season and the corn was full of moisture when frost set in.

NEW SEED TRADEMARKS

The following new seed trademarks were published recently in the Official Gazette of the U. S. Patent Office: "Hardwhite" seed oats. Pedigreed



HARDWHITE



Seed Company, Hartsville, S. C. Filed August 7, 1922. Serial No. 167,892. "Westland" Alfalfa, Red Clover, Alsike Clover, White Clover, and Sweet Clover seeds. Western Seed Growers Marketing Company, Salt Lake City, Utah. Filed November 17, 1923. Serial No. 188,510. "Pedigreed, Productive, Prepotent Seeds" pedigreed seeds. Stoneville Pedigreed Seed Company, Stoneville, Miss. Filed December 9, 1922. Serial No. 173,150. Field seeds. West Branch Co-operative Seed Growers Association, Williamsport, Pa. Filed October 23, 1923. Serial No. 187,398.

WASHINGTON SEED SCARCE

Washington is furnishing 118 farmers in planting 27,733 acres of fall wheat, and approximately 27,700 bushels of seed wheat have been distributed in six eastern Washington counties. Advances of seed wheat in the form of a loan by the state will help many farmers back on their feet, Fred W. Agatz of the Washington Department of Conservation and Development believes.

Douglas County received the largest amount of the state help, 69 contracts being signed with farmers planting an aggregate of 15,555 acres in fall wheat. Grant County was next with 27 contracts and 5,995 acres planted. Figures for the other counties follow: Adams, 13 contracts, 3,598 acres; Benton, 1 contract, 320 acres; Franklin, 7 contracts, 2,140 acres, and Okanogan, 1 contract of 125 acres.

An average price of 89¾ cents a bushel was paid by the state for the seed.

GOOD SEED CORN SCARCE IN NEW YORK

BY ELMER M. HILL

Good seed corn is scarce this season and many New York State farmers will have difficulty in obtaining high grade seed for planting purposes unless they take immediate steps to locate a supply, says the State Seed Analyst at the New York State Experimental Station at Geneva. The shortage of good seed is due to the unfavorable growing season in 1923, followed by an early frost which cut off much of the corn crop before it had fully matured, the seed specialist says. To insure good seed for 1924 plantings, farmers are urged to test all seed before planting. Tests are being made free of charge at the seed testing laboratory at Geneva for New York State farmers and whether the seed is home grown or not, farmers are advised to have the test made to determine how much of it will grow.

"Sufficient tests of seed corn which farmers contemplate planting the coming season have now been made in the state seed laboratory to indicate

conclusively that all that has been said regarding the seriousness of the seed corn situation is true," says the State Seed Analyst. "In fact, the situation is as serious as it was in 1918, when to their sad experience and serious loss, many farmers found that the corn field is a most expensive seed tester. Apparently the long growing season and early frost and freezing weather of last fall seriously injured the seed corn.

"Corn for seed cannot contain much in excess of 14 per cent moisture without serious injury when freezing weather occurs. The situation is so serious that it behooves the farmer to make plans at once to test carefully his own seed corn, or if he contemplates buying, to do so as soon as possible before suitable stocks of high germination of the variety desired are depleted."

ALBERTA SEED IN DEMAND

The favorable records made by Alberta grown seed grain at the recent Chicago hay and grain show have put Alberta grown seed at a premium and the Department of Agriculture there has been flooded with orders from many countries for seed grain from its cleaning and marketing plant. Prices have been fixed as follows for registered seed: Registered Marquis and Ruby wheat, ex. No. 1, \$1 per bushel; fourth generation, \$1.15; third generation, \$1.25; second generation, \$1.35; first generation, \$1.75; Strange's Premium, \$1.75; Registered Banner and Victory oats, ex. No. 1 60 cents per bushel; fifth generation, 65 cents; fourth generation, 65 cents; third generation, 70 cents; second generation, 85 cents; first generation, \$1.10; Bigland's Premium, \$1.10. Registered barley, \$1 per bushel.

KNOW YOUR SEED

Farmers are told by the University of Nebraska Agricultural College to avoid failures and disappointments in their crops by knowing the seed which they are buying. With the exception of potatoes grown under certain conditions it is a good plan, says the College, to buy all farm crops seed as near as possible to the place where it is to be planted.

This is less important with small grains than with other crops. There is being imported into this country considerable foreign seed of Alfalfa and Red Clover. Such seed if grown under climatic conditions similar to the locality where it is to be used will probably be satisfactory. Much of this seed, however, comes from warmer climates and is not adapted, thereby producing less and winter-killing more than locally adapted seed. To buy of a reliable firm from whom you can learn where the seed came from is a good plan.

IMPORTED CLOVER SEED TESTS

Due to the shortage of Red Clover seed in this country large amounts have been imported. There has been considerable discussion current as to the germinating qualities of this seed. The Toledo Produce Exchange, in order to satisfy itself and get authentic information, had C. H. Waldron, chief analyst of the Commercial Seed Laboratory, make a complete test of each 50-bag lot of contract prime, which has been inspected this season.

The sworn statement submitted by Mr. Waldron is as follows:

"This certifies that the Commercial Seed Laboratory has completed 132 germination tests, submitted by the Toledo Produce Exchange as representing each and every 50-bag lot of the prime Red Clover made on the Toledo market between October 19, 1923, and January 14, 1924. This certifies further that the lowest test obtained was 84 per cent was 4 per cent hard seed additional; that the highest was 100 per cent with no hard seed and that the average of the 132 tests was 92.9 per cent with 3.7 per cent hard seed additional."

KANSAS CITY SEED MARKET

BY B. S. BROWN

Due to the heavy fall of snow in February which not only made the roads impossible, but made the grounds too wet for the farmer or the truckster to get into the fields, the seed business was slow in opening up, but with the pleasant weather of March people have been able to get into the city and the trade in the seed houses has started out with a rush. All indications point now toward an unusually good spring. Most of the seeds show an extremely high germination and will run about the same as last year in price. There are some exceptions, however, as the field corn was affected by the damp weather and all the corn which will stand a high test will be very high. The onion sets were affected by the moisture also, and that coupled with the fact that so many were destroyed when W. W. Barnard & Company's warehouse was burned, means that onion sets which are in excellent condition will be very high.

The Harnden Seed Company is finding business good now along all lines. Field seeds are selling especially well. There is also a good demand for early garden seeds such as, peas, beets, radishes, lettuce and onions, both for planting in hothouses

and outdoors. There is a great deal of shipping done by the company, the largest volume of business being done in the territory of Kansas, Oklahoma, Missouri, Nebraska and Arkansas.

C. C. Andrews, of the T. Lee Adams Seed Company, reports that the business in field and vegetable seeds is just opening up but that the trade will probably be normal. The seeds show a very high germination, except field corn and onion sets which have been affected by the damp weather and show a low germination. The seed and the onion sets which show a high test will of course, be much higher than that seed was last year. Other seed will run about the same.

A. Burri, manager of the Mid-West Seed Company, states that orders for grass seeds, field seeds, vegetable, hot bed and potato seed are coming in in fine shape, so that he looks for a good spring business. This winter the company sold birds as a side line with excellent results. This spring he is selling baby chicks, including the brown and white leghorn, the barred rock and red rock, the white Wyandottes and the Anconas. They sell only to the retail trade but have been very successful, and also sell all poultry items, including chicken feed.

SOME SEED MISCELLANY

From a recent information bulletin of the Department of Agriculture we glean the following items, which ought to interest some of those who handle seeds:

Over 8,000,000 pounds of sweet corn for seed was produced commercially in 1922, which is an increase of 100 per cent over 1921, but still 20 per cent less than the five-year average.

Commercial production of garden peas for seed in 1922 totaled 46,600,000 pounds, an increase of 75 per cent over the production in 1921. The average production for the last five years was 54,000,000 pounds.

Pumpkin seed to the amount of 119,800 pounds was raised commercially on 772 acres in 1922.

Over 313,000 pounds of spinach seed was raised commercially in 1922, according to reports reaching the Department of Agriculture. This is an increase of 1,100 per cent over the production in 1921, but is only about two-thirds of the five-year average production.

Commercial production of tomato seed in 1922 totaled 238,000 pounds, an increase of 200 per cent over 1921 and 10 per cent over the 5-year average.

SEED MIXTURES FOR PASTURES

A large variety of seed should be planted in a meadow which is to be turned in to a pasture than is used in one not to be converted into a pasture, says Samuel M. Jordan of the Missouri State Board of Agriculture.

Mr. Jordan says that by using two pounds each of White Blossom Sweet Clover, Yellow Blossom Sweet Clover, Hubam or annual Sweet Clover, Red Clover and Orchard grass and one pound each of Alsike Clover and Timothy, a heavier crop that will last as a pasture through a longer season, at the same time building up the soil, will be secured. From 12 to 15 pounds per acre should be sown in a good seed bed as early as the land can be worked.

Bluegrass is not included in this mixture, due to the fact that if the meadow is used for pasture the Bluegrass will come in more or less rapidly without sowing the seed, provided, of course, it is a Bluegrass community. However, it is rather advisable to include some Bluegrass in the mixture, the planter exercising his own judgment as to how rapidly he wants a set of Bluegrass, because the more Bluegrass he sows the quicker should the Bluegrass rule in his pasture.

REDTOP SEED ADULTERATION

Redtop seed purchased from 41 companies was found to be adulterated or misbranded in the tests made by the U. S. Department of Agriculture on 521 mail samples and 326 purchased lots of the seed, during 1922 from large and small dealers throughout the country. In all cases Timothy was found to be the principle adulterant.

The worst instance of adulterated seed was a bulk purchase of Redtop seed that was found to contain but 20.55 per cent Redtop seed, the remainder was 15.20 per cent Timothy seed, 10.14 per cent other seeds, and 54.11 per cent dirt and chaff. Another instance was a mail sample that was found to contain but 22.62 per cent Redtop seed. The remainder consisted of 58.84 per cent dirt and chaff, 10.39 per cent Timothy seed, and 8.15 per cent other seeds.

Other tests on various lots of the seed showed 33.71 per cent Redtop, 28.03 per cent Timothy seed, 11.65 per cent other seeds, and 26.61 per cent dirt and chaff; 34.10 per cent Redtop, 26.45 per cent Timothy seed, 13.00 per cent other seeds, and 26.45 per cent dirt and chaff; 26.89 per cent Redtop, 10.75 per cent Timothy seed, 11.98 per cent other seeds, and 50.38 per cent dirt and chaff; 40.50 per cent Redtop, 6.54 per cent Timothy seed, 2.32 per cent other seeds, and 51.14 per cent dirt and chaff; 47.70

per cent Redtop, 21.32 per cent Timothy seed, 12.14 per cent other seeds, and 18.84 per cent dirt and chaff.

IMPORTS OF FORAGE PLANT SEEDS

The Seed Laboratory of the Bureau of Plant Industry reports the following imports of forage plant seeds permitted entry into the United States under the Seed Importation Act:

| Kind of Seed | Feb. 1-15, 1924 | July 1, 1923 to Feb. 15, 1924 |
|-------------------------|-----------------|-------------------------------|
| | Pounds | Pounds |
| Alfalfa | 696,400 | 9,555,000 |
| Canada Bluegrass | 16,900 | 527,800 |
| Alsike Clover | 482,100 | 7,880,300 |
| Crimson Clover | 155,600 | 6,681,200 |
| Red Clover | †3,795,700 | 13,840,600 |
| White Clover | 42,700 | 1,056,000 |
| Clover mixtures | 300 | 72,500 |
| Grass mixtures | 100 | 200 |
| Meadow Fescue | 100 | 560,900 |
| Broom-corn Millet | 30,800 | 70,000 |
| Foxtail Millet | 21,700 | 557,100 |
| Orchard grass | 144,600 | 5,199,920 |
| Rape | 49,000 | 1,593,400 |
| English ryegrass | 109,400 | 895,500 |
| Italian ryegrass | 109,400 | 2,334,500 |
| Hairy vetch ..... | ..... | 576,700 |
| Spring vetch ..... | ..... | ..... |

The Seed Laboratory of the Bureau of Plant Industry reports the following imports of forage plant seeds not subject to the Seed Importation Act:

| Kind of Seed | Feb. 1-15, 1924 | July 1, 1923 to Feb. 15, 1924 |
|---|-----------------|-------------------------------|
| | Pounds | Pounds |
| Bentgrass | 21,300 | 293,400 |
| Biennial white-flowered sweet clover | 37,500 | 2,027,100 |
| Biennial yellow-flowered sweet clover ..... | ..... | 89,300 |
| Bur clover ..... | ..... | 4,700 |
| Crested dog's tail | 600 | 81,500 |
| Chewings fescue | 46,100 | 928,300 |
| Other fescues | 5,000 | 405,700 |
| Meadow foxtail ..... | ..... | 10,000 |
| Fescue grass ..... | ..... | 1,500 |
| Rhodes grass ..... | ..... | 7,700 |
| Rough-stalk meadow grass | 600 | 25,800 |
| Sweet vernal grass ..... | ..... | 500 |
| Tall oat grass ..... | ..... | 300 |
| Tall paspalum ..... | ..... | 4,400 |
| Velvet grass ..... | ..... | 19,400 |
| Wood meadow grass | 2,300 | 11,800 |
| Yarrow | 200 | 700 |

*Mostly from France, Argentina and South America.

†2,228,400 pounds from France; 658,600 pounds from England (79,300 pounds of Chilean origin); 368,500 pounds from Italy; 152,900 pounds from Chile; 167,400 pounds from Hungary; 109,100 pounds from Czechoslovakia; small amounts from Canada, Germany and Scotland.

SPRING TRADE DEVELOPING IN NEW YORK SEEDS MARKET

BY C. K. TRAFTON

The active opening up of the new spring season has been the feature of the local market for seeds during the month under review. Climatic conditions have been about normal, temperatures in the main being seasonable, although in some quarters there have been complaints of occasional freezing temperatures, and from many sections reports were received that the soil was too wet to permit of extensive farming operations. In other districts, however, it was evident that farmers had started their early farm work or were expecting to do so in the near future. There has been a general reduction of stocks, and this coupled with prospects of a continued active demand and the generally higher cost of important foreign seeds, has kept the majority of holders in a decidedly firm mood. In the majority of cases prices quoted are the same as those current a month ago, although in a few cases lower quotations prevail. On the other hand, other special varieties are higher.

Red Clover is one variety to show a decline, being quoted on spot here at 19½ cents to 20½ cents, or 2 cents lower than a month ago. This decline was mainly a reflection of the weakness prevailing during February in Toledo, from which market numerous claims were received anent the unwillingness of farmers and interior dealers to buy the imported variety, even at a substantial discount under the domestic, owing to adverse propaganda. Shipments out of that market were small and as prices there eased off quotations here followed suit. At the lower levels, however, a much better demand developed and numerous large orders were received, including requests for quick shipment from certain large interior distributors, who had previously refrained from buying. In the meantime, arrivals from abroad showing a marked diminution, and as noted in previous reviews, a large proportion of the total was shipped out immediately on old orders. At times there were moderate accumulations, which was fortunate as it enabled shippers here to fill their orders and prevented a more serious depletion of the local supply. Practically nothing was done for import, partly because of the lateness of the season, and partly owing to the generally firm views of foreign shippers who offered little or nothing and stated that supplies had been well cleaned up, and especially of choice seed. Early in the month choice French seed was offered at 15 @ 15½ cents c. i. f. and f. a. q. at 15½ @ 14¾ cents. Later, because of the drop in the franc, f. a. q. was offered as low as 13 cents, but owing to the late shipping position nothing was done. German seed was offered at 16

cents c. i. f. and a poor quality English seed at 12½ cents. Chilean seed was offered at 16½ cents c. i. f., buyers showing some interest, but at much lower levels. Total arrivals for the month were 19,550 bags, compared with 33,690 bags during January.

Alfalfa on spot is now quoted at about the same as a month ago—20 @ 21 cents, although early in the month there was a slightly easier feeling. At that time certain dealers became more anxious to sell and the lower prices named stimulated a more active demand from the West and South, which indicated that supplies of domestic seed had been seriously depleted. This buying served to clean up various lots which had been hanging over the market and with these removed and almost nothing additional received the tone again became firmer. The Argentine market remained firm, only a small lot of old crop being offered for March shipment at 15 cents c. i. f. Some interest was shown in new crop seed, but owing to unfavorable crop developments shippers withheld offers, although some were reported—generally believed to be speculative—for March-April shipment at 13 cents c. i. f., with a possibility that this might be shaded ½ cent. Buyers were said to be interested at 12 cents. Later shippers offered for April-May shipment at 13 @ 14 cents c. i. f. Owing to the rains much of the seed is said to be spotted and it is feared that it may not come up to 98 per cent. Arrivals were only 1,740 bags from France, compared with the January total of 3,800 bags.

Crimson Clover was inactive and nominally unchanged at 8 @ 8½ cents. About 1,200 bags were received from France against 300 during January.

White Clover was neglected for the greater part of the month, but latterly fairly active interest has been shown, indicating the beginning of the spring demand. With light stocks and arrivals of only 65 bags, the tone remains firm at 49 @ 51 cents f. o. b. European shippers reported supplies exhausted and made only small offers at 43 @ 45 cents. c. i. f.

Rye Grass has been dull and nominally unchanged at 11½ @ 12 cents. Importers reported a small business on a basis of 10 cents c. i. f. for Perennial. Arrivals were 750 bags, against 1,390 in January.

Sunflower seed was in poor demand during the greater part of the month, spring feed millers generally holding aloof. Some buyers who did show interest continued to harp on the alleged offerings of domestic seed at 4 @ 4¼ cents, but as noted in our last review, it was generally conceded that such seed was of poor quality. Hence holders of choice domestic seed continued to ask 5½ cents for re-cleaned No. 1 and 4¾ @ 5½ cents for No. 2, while Argentine seed was still held at 2½ @ 2½ cents c. i. f., with possibly a little available at 2.35 cents. Subsequently as the domestic crop was going steadily into consumption buyers began to show more interest in foreign varieties. They evidently realized that it was useless to talk of "cheap" domestic offerings in view of the continued firmness among holders of really choice seed. Hence sales were made of Argentine seed on spot at 2½ cents c. i. f. in car-lots and at 2.60 cents to 2.75 cents in small lots. At the outset the market for import was quiet, although some interest was shown at 2.60 cents to 2.75 cents c. i. f., but holders generally asked 2.80 cents. Subsequently business was reported on the Pacific Coast at 2.45 cents to 2.50 cents. For the Atlantic Coast 2.60 cents was quoted without leading to business. Danubian seed was consistently quoted at 3¼ cents c. i. f. both on spot and for shipment. No arrivals were reported during the month, compared with 660 bags in January.

Canary seed continued to advance during the month as there were no arrivals, and, in addition to further demand from speculative sellers who were anxious to cover their contracts, marked improvement was noted in the actual consumptive demand. Once again it became evident that distributors had refrained from buying until stocks here were almost exhausted. No doubt this buying was prompted by the disappointing developments anent new crop Argentine seed, which many had apparently expected to buy at much lower prices, being misled by the speculative advance sales at 3½ cents or less last December. In some quarters it was claimed that few shipments had been declared on February contracts and hence it was feared that arrivals during March would be light. Others declared that there would be ample arrivals during March and predicted that seed would then be available at about 3½ cents c. i. f. Nevertheless, after sales early in the month at as low as 4 cents c. i. f. business was done at 5 cents and some holders of spot Morocco seed asked 5½ cents. Seed on the water was quoted at 5 cents, while Argentine seed due to arrive this month was held at 4¾ cents c. i. f. compared with 3.40 cents previously. The import basis also moved up sharply. Early in the month there was a good demand at 3¾ cents c. i. f., but the cheapest seed available was at 3¾ cents on re-sale. Some of this sold at 3.85 cents, while direct business was reported at 4 @ 4.10 cents for February-March shipment.

Later this position advanced to 4.10 @ 4.25 cents and still later straight March shipment was held at 4½ cents. March-April shipment was wanted at 3½ cents, but shippers asked 3.90 @ 4.10 cents and later 4.10 @ 4.30 cents. One shipper quoted 4½ cents for August-September. Morocco reported the old crop virtually exhausted and only small lots were offered at 4½ cents c. i. f. Later new crop was offered at 5 cents c. i. f., but this was too far off to interest buyers.

Rapeseed was quiet but firm at 5 @ 5½ cents in a large way and 5½ @ 5¾ cents in smaller lots. Arrivals were 1,700 bags, against 1,150 during January, but these caused no pressure as the Dutch market remained firm, shippers showing no anxiety to sell as they expect higher prices because of depleted supplies. They generally quoted 4.75 @ 4.80 cents c. i. f., although in reply to a bid one offer was received at 4.60 cents. French seed was offered at 4½ cents. Argentine bird rape was firm at 3.75 cents on spot with shippers asking from 3.40 cents to 3.60 cents. Only 280 bags were received, against 1,150 in January.

Spring Vetch has moved in a routine way on a slightly firmer basis. Most of the business was at 2½ cents c. i. f. with some at 2¾ cents.

Millet remained lifeless with feed manufacturers still showing little interest. Yellow hog was quoted in a large way at 2¼ @ 2½ cents and in smaller lots at 2¾ @ 3 cents. Foreign varieties remained wholly nominal at 3 @ 3¼ cents.

Hempseed remained quiet and nominally unchanged at 3¼ @ 4 cents. Seed afloat, due this month, was held at 3.65, but later some was said to be available at 3.35 @ 3.40 cents. Shippers remained firm at 3.25 @ 3.35 cents, but little business was reported. There were no arrivals, against 270 in January.

Holland green peas were in fair demand for shipment at 4½ cents c. i. f. for double-cleaned and 4½ cents for f. a. q. The former were quoted on spot at 5 @ 5½ cents c. i. f. and the latter at 4.75 @ 5 cents c. i. f.

Argentine red corn was in good demand and owing to the light spot supply the market was generally firm at 2.75 cents. Argentine shippers reported stocks exhausted by a good home demand and hence some would not offer. Others offered sparingly at 2.20 @ 2.30 c. i. f.

New Zealand shippers reported that new crop fescue was coming in and offers at 22 cents c. i. f. met with fair response. Buyers evidently expected prices to advance later as it was feared that the crop might be smaller than last year's. Later fair sales were made at 21½ cents for March-April shipment. Only 20 bags arrived, against 435 in January.

AN EFFICIENT SEED INSPECTION LABORATORY

Eleven years ago the legislators of Montana passed the original Montana seed law and provided for the establishment of a state grain laboratory. During the first year of its existence the laboratory employed one man and 767 hours of student labor; in 1921-1922, the superintendent of the laboratory, W. O. Whitcomb, reported that three men and 4,990 hours of student labor and a clerk were kept busy in its testing, grading and investigational work. The maintenance appropriation for the first year was \$3,000; that for 1921-1922, \$10,740. These figures show most effectively the importance which the Montana Grain Inspection Laboratory—its assumed title in 1917—is gaining in the agricultural development of the state.

The laboratory was recently certified as a certified seed laboratory by the Official Seed Analysts Association, and through the Association is allied with 35 other seed laboratories in the testing of seeds for their identification, viability, and adulteration and for the determination of the presence of noxious weeds. It has adopted the rules recommended by the Association.

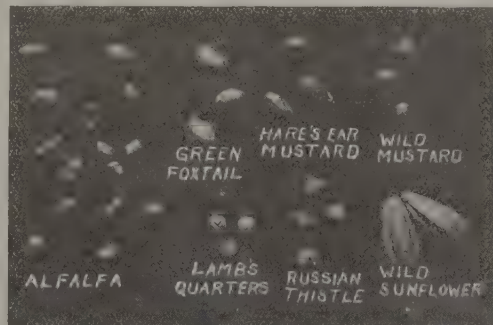
The work of the laboratory is divided into two classes, service work and investigation. The former includes the testing of seeds for purity and germination, the establishment of the true grade and dockage of grain, the identification of grains, seeds, weeds, etc.; the making of gluten tests of wheat and flour; and the making of milling and baking tests of samples of wheat which are submitted by farmers and grain dealers.

The investigational work consists of making milling and baking tests to establish the relative value of different varieties of wheat and of wheat showing varying forms of damage and the study of the problems in connection with the germination and seed values. Up until 1922, the last year for which figures are available, the laboratory had tested 41,887 samples of seeds for purity and germination, and had made 3,231 seed inspections in connection with the enforcement of the seed law. No fee is charged residents of the state for seed tests, but a fee of 25 cents per sample is charged non-residents.

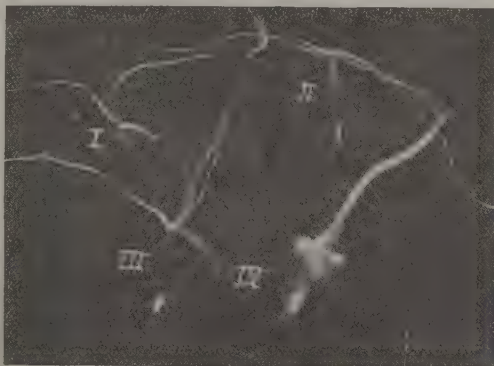
An illustration of the kind of work the laboratory does is given in the story of a farmer who came to the laboratory with seed which had been sold to him as Durum. The resultant crop showed

but 27.4 per cent Durum, 57 per cent Hard Red Winter wheat, with weeds, inert matter, oats, rye and Hard Red Spring wheat making up the remainder. Several times farmers found through the inspection laboratory that they had been given Red Durum wheat, which is of poor milling quality, instead of Marquis wheat. Instances like this prove that an efficiently conducted seed inspection laboratory can save the farmer money and spare him much trouble and disappointment in crop failures.

At first the laboratory gathered seeds from dealers' stocks for inspection but in 1921 this duty



MONTANA ALFALFA SEED AND SOME IMPURITIES



GERMINATION IN FIVE DAYS
I Wheat, II Oats, III Barley, IV Corn



GERMINATION TESTS FOR SEED



MAKING PURITY TEST FOR SEED

was transferred to the inspectors of the State Department of Agriculture. The laboratory in one season in 1920 collected 385 samples from 83 dealers in 32 towns. That year but 45.5 per cent of the seeds inspected was labeled and only a small proportion of that property. In 1922, 61 per cent of the seed inspected was labeled, and a vast improvement was shown in the kind of information given. This illustrates that gradually the seed dealers of Montana are coming to fill the requirements of the law.

The laboratory does not confine itself to testing seeds, but is active in grain grading as well.

Grade and dockage were established on 923 samples of grain in 1920-1921 and 1,024, in 1921-1922. It is becoming a common practice for dealers and producers who ship wheat out of the state to have cars sampled by an official of the laboratory and have the grade established by the inspector.

The Montana Grain Inspection Laboratory has, in addition to its grain grading and seed testing work, done considerable investigational work. In its comparison tests of laboratory germination with field tests for crop seeds, it found that the laboratory germination tests for crop seeds conformed very closely to the field tests. It has also made tests for hard seeds in legumes and on methods of treatment; and on the relative value of green ripe seeds in Alfalfa and Sweet Clover.

Probably its most important work is the part it has in the enforcement of the Montana Seed Law. The law requires that seed offered for sale in quantities of one pound or more be labeled accurately, including the commonly accepted name of seed, approximate percentage of germination with date of test, approximate per cent of the five noxious weeds, approximate percentage of other foreign seed and foreign material, county in which the seed was grown and address of seedsmen or person offering seed for sale; it provides for the free testing of seeds, the inspection of seed sold in state and the enforcement of the law and the punishment for violation of same.

The laboratory in making the tests follows rulings established by itself. It requires one handful or two ounces of small seeds like Alfalfa or grass and two handfuls or four ounces of large seed such as wheat, corn, etc. It will not make more than 50 purity and 100 germination tests for one individual per month, although it receives and will hold for future testing more than this amount; it gives preference to "agricultural" seeds; and specifies that its reports cannot be used for advertising purposes.

In making the purity test for seeds, the sample is divided by a mechanical device such as is shown in one of the accompanying illustrations until the desired portion is secured. This portion is weighed, and hand separated into pure seed, crop seeds, weed seeds, and inert matter. Each is identified and weighed and the percentage is computed on the basis of original sample.

In its germination tests several kinds of apparatus are used. In our illustration, one type, the alternating temperature method, is shown. A temperature of 20 degrees Centigrade is maintained for 18 hours and of 30 degrees for six hours. The temperature is controlled by means of electric heating unit with thermostat and cool running water. The seeds are placed either between or on top of folds of moist blotting papers.

The Montana Grain Inspection Laboratory is located with the Montana Agricultural Experiment Station at Bozeman and is under the direct supervision of Clyde McKee, director; W. O. Whitcomb, superintendent, and R. E. Kellogg, assistant. These men are on the job every minute of the day to see that the farmers of Montana are given every opportunity to improve the grains grown on their farms.

MILWAUKEE MARKET

BY C. O. SKINROOD

If the figures furnished by the railroads can be taken as a criterion the shipments of Clover seed and Timothy seed from Milwaukee last month were considerably under the levels established by the trade for the corresponding month a year ago.

The receipts of Timothy seed at Milwaukee for the past month were only 272,100 pounds as compared with receipts of 661,880 pounds for the corresponding month a year ago. The receipts of Clover seed are 137,705 pounds as compared with receipts of 113,824 pounds for the corresponding month a year ago. The receipts of flax seed were 14,250 bushels as compared with receipts of no less than 108,610 bushels for the corresponding month a year ago. The shipments of Timothy seed from Milwaukee for February were 1,146,965 pounds as compared with shipments of 1,459,397 pounds for the corresponding month a year ago. The shipments of Clover seed were 1,072,625 pounds as compared with shipments of 1,727,895 pounds for the corresponding month a year ago.

The shipments of flax seed were nothing as compared with shipments of 54,955 bushels for the corresponding month a year ago.

Several Wisconsin counties are claiming the high record for progress in planting Alfalfa, Brown County claiming to have the real state record in booming Alfalfa. Since 1920, according to J. N. Kavanaugh, the county agent, the Alfalfa acreage has increased no less than 964 per cent. For 1924 the biggest program of the county agent is to again set a high record in Alfalfa acreage, Mr. Kavanaugh states, as it is the pre-eminent need of a great dairy state, he believes.

Some estimate that as high as 50 per cent of the Clover seed used in Wisconsin may be foreign seeds, consisting largely of seed imported from France and Italy. While this estimator says that Wisconsin farmers show a preference for the domestic

seeds, it will be impossible to supply everyone without using a considerable amount of the foreign grown seeds.

A considerably larger demand for Alsike seed than usual is expected from Wisconsin this year, some farmers having reported that they will turn to Alsike, largely because of the shortage in the supply of Clover seeds. It has been recommended by the College of Agriculture both for poorly drained soils where Clover frequently does not do well and for well drained uplands as well.

The report recommending Alsike states that it will not yield as much hay as the common Red Clover but, on the other hand, if it is seeded with Timothy for hay or pasture, it makes a good forage crop.

The report also adds that the seed of Alsike is very small and that five pounds of Alsike to the acre with eight or ten pounds of Timothy seed will make a good mixture, while six pounds of Red Clover with two and a half pounds of Alsike, also with Timothy, will make a desirable combination.

Many farmers in Wisconsin this year, it is reported will turn to soy beans. The College of Agriculture recommends the use of this forage for those who are inclined to get away from the high priced grass seeds.

The college states that the soy bean is equal to Alfalfa in lime and protein content and it will yield from one to two and a half tons an acre, depending on the soil and the season. It will grow on almost any kind of soil, high or low, thick or thin, sweet or sour, early or late. It is estimated by the Department that if the soy beans yield only a ton to the acre, the value is about \$28 per acre. The report also states that every farmer should plan to have about one acre of soy beans for each cow owned, this being sufficient with silage to provide a full winter feed with milk flow.

The official report of the Milwaukee Chamber of Commerce on the seed market for the past month says that the seed trade has ruled firm and the Timothy seed has gone up from 25 to 50 cents for the fancy grades. The demand for seeds was reported as fairly active for the better grades and larger offerings were readily placed.

Red Clover prices were quoted at \$22 to \$23 for the choice to fancy kinds and from \$16 to \$21 for the usual country lots, while the dirty offerings went down to \$13 to \$15. The White Clover was quoted from \$25 to \$40, the No. 1 Northwestern flax from \$2.55 to \$2.68. Timothy prices were quoted at \$5.50 to \$6.75 for the poor to fair kinds, from \$7 to \$7.75 for the good to choice and from \$8 to \$8.25 for the choice to fancy grades.

The North American Seed Company says the market for seeds has been very active, in fact the volume of buying has been beyond expectations. The farmers are accustomed to paying high prices for seeds and continue to buy regardless of the price level. In fact the price level for seeds is not

any higher than last year, the company believes.

The condition of the seed market is reported as firm with a tendency toward advances in some lines where the greatest scarcity may be said to exist. The buying of Alfalfa from Wisconsin, the North American company says, will be very large but this trade normally comes a little later in the season.

An excellent demand for seeds is expected during the entire remainder of the buying season, the North American concern believes. All the conditions for the seed trade are reported as exceptionally favorable so that nothing stands in the way of the continuation of the buying which has been manifested up to this time.

The Red Clover is quoted by the North American company as ranging from \$22 to \$24, the Alsike ranges as a rule from \$14 to \$16, the Sweet Clover quotation is \$14 to \$15, Timothy is quoted generally from \$7.75 to \$8.25 and the White Clover at \$35 to \$45. The Alfalfa seed is quoted from \$20 to \$24 at the present time.

The Courteen Seed Company says trade in practically all lines of seeds has been exceptionally active during the past 30 days and this same rate of demand is confidently expected to last for all of the rest of the season.

As for advice to farmers to plant Alsike and soy beans and other substitutes in order to dodge the high price of Clover seed, the Courteen company says this is beside the point entirely and that grass seeds are now cheaper than last year in all probability, at least in some lines. With the supplies of imported seed which are now available, Mr. Courteen says there will be plenty of good seed for all demands.

The Courteen company quotes Red Clover at \$21 for the imported goods, and at \$22.50 for the high grade domestic seeds. The Alfalfa quotations are given at \$21 to \$22, Alsike is given a wide range—\$12 to \$16, and Timothy is quoted from \$7.50 to \$8.50. The White Clover quotations rule from \$38 to \$44, the Courteen company adds, and Sweet Clover from \$12.50 to \$14.50.

The L. Teweles Seed Company says the volume of trading in seeds has been large and that the outlook is very favorable in all lines, in fact the demand is expected to hold up well during the entire spring season.

For a time, the Teweles company says, the Red

Clover market was a little weak due to the importations which were being made but now the market has firmed up again. The Timothy market is quoted as steady to firm, in fact there is no weakness in the seed market in any quarter at this time.

As for reports that the high prices of seeds will tend to retard the demand, the Teweles company takes no stock in this rumor because in general the prices are believed to be only a trifle higher than a year ago, perhaps 5 per cent on the whole. This is held too slight a change to interfere with the normal buying demand which is expected at this season of the year. Some seeds are a trifle lower and some are a shade higher.

A very firm market is quoted for Alfalfa by the Teweles company because the demand is good and the buying from Wisconsin is expected to assume record proportions this year.

The Teweles company says that Red Clover prices now range from \$20 to \$23, the Alfalfa market rules from \$21 to \$24, the Timothy market runs from \$7.75 to \$8.25, Alsike from \$14 to \$16, White Clover from \$40 to \$45 and the Sweet Clover ranges from \$14 to \$15.

Capitalized at \$10,000, the Rosslebein Seed Company has been incorporated at Wilmington, Del.

A new seed storage plant costing \$10,000 is to be built by the Magnesia Products Company of Milwaukee, Wis.

Four-power driven bean sorters have been installed by the George Nichols Seed & Supply House of Jerome, Idaho.

A new type separator, specific gravity cleaner and grader, has been installed by the Kelley Seed Company of San Jose, Ill.

A new warehouse has been completed at Plant City, Fla., by the Kilgore Seed Company at a cost of several thousand dollars.

The property of the Wing Seed Company at Mechanicsburg, Ohio, has been bought by W. A. Burpee & Co., of Philadelphia, Pa., at a receiver's sale.

L. C. Barrett is now with the Braslan Seed Growers, Company, Inc., of San Jose, Calif. He was formerly manager of the Spokane Seed Company of Spokane, Wash.

A building in Chicago has been bought by the J. Oliver Johnson Seed Company, Inc., of Chicago. It will be remodeled into a warehouse with 60,000 square feet of floor space.

The Adams Seed Company of Decorah, Iowa, has been reorganized as the Decorah Seed Company. The general manager is Charles B. Bovier, Jr., formerly with Denver seed houses.

Another warehouse will probably be built in the near future by the Manitowoc Seed Company of Manitowoc, Wis., which has bought a site of ground adjoining its present warehouse.

Charles E. Prunty of St. Louis, Mo., advises the seed trade in a recent communication on foreign seeds to be always on guard in not sending out seeds which have not yet been acclimated.

To deal in seeds, sundries and feeds, the Great Lakes Wholesale Seed Company has been incorporated at Chicago, Ill., capitalized at \$1,000. The incorporators are M. I. Rosenbaum, Lewis Bennett and Isadora Viz.

Capitalized at \$10,000, the Florence Seed & Fertilizer Company has been incorporated at Florence, S. C., with D. C. Shelly, president, and L. S. Shelly, vice-president. The company will act as seed and fertilizer dealers.

A seed business is to be conducted at Louisville, Ky., by C. F. Wood, formerly with the Albert Dickinson Company. Prior to his connection with the Dickinson company, Mr. Wood was in charge of the Federal Seed Reporting Bureau.

J. W. Hare has bought the J. W. Hare Seed Store at Mason City, Iowa, at public auction. Owing to financial losses involved by the failure of his partner, the company was placed into bankruptcy, but friends of Mr. Hare advanced him credit to resume business.

R. C. McGill has organized at San Francisco, Calif., as the R. C. McGill Seed Company. He recently sold his interests in R. C. McGill & Co., to the Louis, Simas & Jones Company of San Francisco, Calif., which is a corporation formed by the partners of the old concern.

An additional site has been bought by the Manitowoc Seed Company of Manitowoc, Wis., on which the company contemplates erecting another warehouse. It has sold its old office and warehouse but the transfer of this property will not be effective until October 1.

Golf is now the accepted sport and new golf courses are being built each year and the old ones renewed. All this takes grass seed. So the booklet entitled, "From Tee to Green" just issued by J. M. McCullough's Sons Company of Cincinnati, Ohio, will find many interested readers. The grasses best adapted to the putting greens, and fairways of the golf course are discussed in detail, and the desirable mixtures of seeds, etc., are given. It's a handy little booklet for the seed dealer.

CRAWFORD HAMMOND & CO.
BUENOS AIRES NEW YORK
IMPORTERS
SEEDS PEAS CORN

The Mangelsdorf Seed Co.
Sweet Clover, Alfalfa,
Soudan Grass, Millet, Rape.
ATCHISON KANSAS

North American Seed Co.
Wholesale Grass and Field Seeds
Milwaukee, Wis.
"THE HOUSE OF QUALITY"

COW PEAS SOY BEANS SUDAN
MILLET CANE
Agricultural Seed Company
230 Biddle St., St. Louis, Mo.

Exporters Importers
Nungesser-Dickinson Seed Co.
NEW YORK, N. Y.
Wholesale Seed Merchants
Buyers and Sellers
Timothy, Red, White, Alsike and Alfalfa,
Clovers, Redtop and Millet Seeds

BETTER SEEDS; BETTER CROPS
SEEDS CHAS. E. PRUNTY
7 South Main Str. SAINT LOUIS



BUYERS—SELLERS, FIELD SEEDS
ED. F. MANGELSDORF & BRO.
Wholesale Field Seeds First and Victor Sts., St. Louis, Mo.

WHITNEY-ECKSTEIN SEED CO.
Wholesale Seed Merchants
Correspondence Invited BUFFALO, N. Y.

COAL

TO STUDY SCREENINGS PROBLEM

Requests have been made the Department of the Interior by Illinois coal mine operators that the Central Districts Experiment Station of the Bureau of Mines at Urbana, Ill., be authorized to study the problem of reducing the proportion of screenings in the coal mined in this state. This is said to have become a quite acute problem with Illinois coal operators.

The market for Illinois coal is largely one for coal to be used in heating dwelling houses. The demand, therefore, is for the larger sizes. So acute is the situation that often there are hundreds of unbilled cars of screens, but not one of lump. This problem of screens has been growing more intense since the plan of paying the miners for "run-of-mine" tonnage rather than for "screen coal" tonnage came into existence.

While there are other factors involved, one of the most important causes of this excess of screenings, according to the Bureau of Mines, is the method employed in the use of explosives.

SOFT COAL OUTPUT

Although there was improvement in the production of soft coal in the last week of February, the recovery was not sufficient to carry it to the level of the most recent full-time week, according to the United States Geological Survey in its report of the week March 3 on coal production.

It now appears, the survey declares, that the observance of the Washington's birthday holiday and the severe storms in the eastern part of the country were only partly responsible for the decline in that week, and that slacking of demand which was partially concealed, was the important thing.

The total output in the week ended March 1, is now estimated by the survey at 10,705,000 net tons, an increase of 338,000 over production in the holiday week, but a decrease of 434,000 tons from that in the week ended February 16.

The average production each working day was 1,784,000 net tons. In the last two weeks the average daily rate has been lower than at any time since the Christmas holidays.

From the viewpoint of soft coal production the present coal year, ending March 31, 1924, is far ahead of the years of depression and is but 2 per cent behind the average year of industrial activity.

NEW WAGE PACT DECRIED

The Coal Operators Association of the Fifth and Ninth Districts in Illinois believes that the new three-year wage pact recently entered into by operators and miners in the Central Competitive Field is disastrous and will work hardships on the owners and miners alike, on the latter through unemployment which is very apt to occur. A statement issued by the Association said in part:

"The contract between the United Mine Workers of America and the operators represented at the Jacksonville (Fla.) conference nominally extends present wages and working conditions to the miners working in and about the various mines involved for a period of three years from April 1, 1924.

"As a matter of fact it is physically impossible in such a manner to extend the wages and working conditions to the employees involved for the period of time provided in the contract.

"Was a contract or a death warrant signed at Jacksonville? If the latter whose funeral is it?

"Oratory on the needs of the wives and children and their prospects of want and suffering if a scale of less than \$7.50 a day and \$1.08 a ton is accepted sounds very well. But the contract signed means nothing a day and no tonnage—no daily bread and no annual income to thousands who bear allegiance to the Union and consider themselves attached to the coal industry, before its terms are fulfilled.

"It is apparently a contract and agreement to suffer bankruptcy and loss of credit and property, regardless of capital invested; regardless of the preparation of their product; regardless of their future importance to the community, on the part of hundreds if not thousands of operators whose interests are all in the organized territory."

COAL PRODUCTION IN 1923

A total of 545,300,000 tons of soft coal were mined in the United States during the year 1923, says the United States Geological Survey in its report for the week ending January 7.

"The universal observance of Christmas as a holiday at the soft coal mines and the cessation of work at many mines on the day before and after Christmas resulted in a sharp decline in production that brought the total output down to 6,684,000 net tons in the closing week of 1923."

"The production was a decrease of 3,859,000 tons,

or 36.6 per cent, and was the lowest figure recorded during the year. On the last three days of the week, however, production recovered to about the same level as in the preceding week.

"The total of the weekly estimates of soft coal production, including an allowance for production, on the last day of the year, indicates that the total output in 1923 was approximately 545,300,000 tons. In comparison with 1922, this was an increase of more than 29 per cent. In only three years—1920, 1918 and 1917—has production exceeded that of 1923. In fact it is quite possible that when these estimates based on the week be records of coal loaded, which necessarily contain a certain error, are replaced by the final reports from the mines themselves, it will be found that production in 1923 exceeded 1917.

"The sharp increase in production of soft coal in the week ended December 22 was reflected by decided improvement in mine operating time. The operator's reports for the week show perceptible increases in all districts except Illinois, Indiana, the West Virginia Panhandle, Virginia, Iowa, Colorado and Washington. Districts where particularly notable increases occurred were Fairmont, Pocahontas, Tug River and Kanawha."

SUPERIOR-DULUTH COAL MARKETS

Shipments from the docks over the Northwest fall off with milder weather conditions, but fair tonnages are still being moved, says the *Coal Trade Journal*, in its report of March 7. Supplies carried over at opening of navigation are expected to be smaller than earlier estimates.

Though shipments from Duluth and Superior docks slackened during the last week as a result of mild weather conditions, the tonnage handled is still substantial. While the volume of coal handled this month will be much smaller than during January, when sub-zero conditions prevailed, a heavy gain will be shown over the same period last year.

A feature during the last few days was a renewal in shipments of railroad coal from the docks to their fueling depots over the Northwest.

Though buying in industrial coal is still on a hand-to-mouth basis, bookings have been mounted up into a fair aggregate for the reason that factory operations in most lines over the Northwest have been showing improvement lately, and there were few accumulations on hand in any quarter as a rule. Shipments to public utilities companies are forming a good back-log for the dock companies as a rule. Numbers of municipal plants are now operating by steam that had for years back in some cases relied upon hydro-electric power. That condition is due to shortage of water in storage dams. It is regarded as interesting to note that two power companies, one monopolizing the field in northern

Minnesota and the other in southern Minnesota, have placed orders for many thousands of tons each with the dock companies lately.

A survey of the docks during the last week has led members of the trade to revise their views regarding the extent of the stocks likely to be carried over on the docks at the opening of lake navigation. Though bituminous stocks now on hand approximate about 4,200,000 tons, less than two-thirds of this tonnage is free coal, and from the character of the orders being booked now, it is felt that the docks will have limited tonnages of free coal on hand April 1.

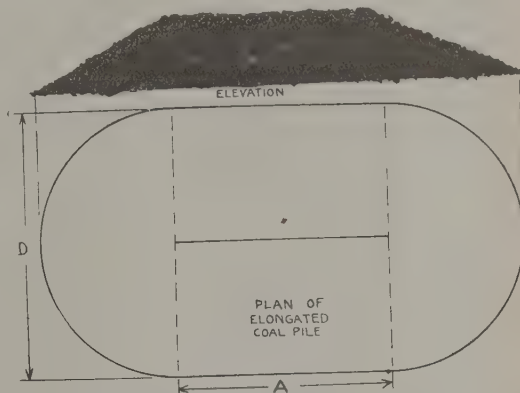
TONS OF COAL IN ELONGATED PILES

BY W. E. SCHAPIORST

When bituminous coal is piled in a conical pile the tonnage in the volume is easily estimated from the formula $.00248 D^3$ where D is the diameter of the pile in feet at its base. But coal is often stored in elongated piles similar to the sketch herewith in which case the tonnage of bituminous coal is computed from the formula:—

$.00248 D^3 + .0047AD^2 = \text{tons bituminous}$, where A is the length of the "crest" on the pile in feet. The best way to determine the length of this crest is to subtract D from the total length of the pile at its base.

The sketch shows one of these piles both in elevation and in plan. The plan shows clearly how the



pile can be cut up into three parts. The two curved end portions when added together give us a pure and simple cone, whence we have the $.00248D^3$ in the formula. The central portion has a triangular section from end to end and its volume is one-half as great as would be the volume of a rectangular block having the same base and height. The tonnage in this central triangular portion is $.00474AD^2$. Adding the two together we therefore have $.00248D^3 + .00474AD^2$.

Where the coal is anthracite instead of bituminous the formula becomes:—

$.00172D^3 + .0033AD^2 = \text{tons anthracite}$.

D and A are both measured in feet.

These formulas are based on the fact that one ton of coal occupies 38 cubic feet on the average,



WHEN YOU BUY COAL

Consider these facts

Since 1883 we have been supplying carload coal buyers.

For forty years the name PEABODY has stood for Good Coal and Efficient Service.

Today PEABODY is operating 44 mines in 12 districts with daily capacity of 86,000 tons and shipping coal to the dealers and industries of 48 states and British Columbia.

We invite your inquiries when in need of coal.

PEABODY
COAL COMPANY
CHICAGO

Cincinnati
Springfield
Saint Louis

Kansas City
Omaha

Deadwood, S. D.
Kleenburn, Wyo.
Spokane, Wash.

KNOWN FOR RELIABILITY SINCE 1883

whether anthracite or bituminous. The natural cone of anthracite is 0.25 as high as it is in diameter at its base. For bituminous coal the value is 0.36.

COAL WHOLESALERS EXONERATED

The Federal Trade Commission in its recent findings, dismissing the complaint against Madeira, Hill & Co., anthracite coal operators and six wholesalers, has given coal wholesalers a reason for rejoicing and has done much to destroy the effect of the United States Coal Commission's "pyramiding of profits" discussion.

The Coal Commission's charges have done the wholesalers considerable harm for wholesalers have been charged with passing anthracite coal through a number of hands in order to raise prices unduly.

The Federal Trade Commission was ordered to investigate conditions by President Coolidge and took the case mentioned above as a test case, with the result that the claims could not be substantiated by proof and complaint was dismissed.

Commenting on the decision, in a letter to C. L. Dering, president of the American Wholesale Coal Association, Ira C. Cochrane, commissioner of the American Wholesale Coal Association, said:

"This quasi-judicial pronouncement of the Federal Trade Commission has more weight than any utterance of the United States Coal Commission, regardless of the character of the personnel of the latter. The Federal Trade Commission did make a formal complaint. It did hold formal hearings at which time opportunity was given to hear and cross examine witnesses in the presence of the public, and from the testimony introduced a decision was reached. The United States Coal Commission conducted no such hearings—no formal taking of testimony under oath, no cross examination of witnesses, no access of the public to its sessions and no judicial determination from its record."

The retail coal and grain business of the Mathews Bros. at Dunlap, Ill., has been bought by O. D. Risdon.

The elevator and coal business of T. F. Smith at Vermillion, Kan., has been bought by D. L. Anderson who will improve the plant.

The coal and grain business of the William Krotter Company at Anoka, Neb., has been bought by the Anoka Butte Lumber Company.

The coal and elevator business of the McCaull-Webster Elevator Company at Brunswick, Neb., has been taken over by J. E. Meuret.

The retail coal business and grain elevator of G. W. Glynn at Sturgeon, Mo., has been sold by him to the Pollock Milling Company of Mexico, Mo.

The interest of R. F. Scott in the coal and feed business at Beaumont, Texas, has been sold by him to his partner, L. L. Rutledge, who has assumed complete control.

The coal and grain business of the Farmers Elevator Company at Martinton, Ill., has been bought by the recently incorporated Martinton Grain Company. Its capital stock is \$45,000.

NEW STANDARDS

Grain dealers who handle side lines will be glad to learn that, through the efforts of the Fabricated Production Department of the Chamber of Commerce of the United States, a number of industries have agreed upon a material reduction in sizes and types of material, making these products much easier and more profitable to handle.

Efforts of the hollow building tile industry over a period of 18 months culminated in a most constructive simplification program. On October 19, 1923, representatives of the producers, engineers, contractors and others determined upon 19 types of hollow tile as necessary to comply with all the real needs of the industry and trade. This accomplishes an elimination of 21 unnecessary varieties and, furthermore, establishes definite standards of weights and tolerances for each adopted size. The action became effective January 1 of this year and is subject to annual revision.

Probably the most extensive and far-reaching simplification project yet undertaken through co-operation of all factors was that achieved by the lumber industry on December 12 and 13, 1923. Something over 100 representatives of all involved interests took under consideration some 38 recommendations previously prepared by the central committee of the industry. These recommendations may be broadly grouped into the following 6 classifications, all of which were adopted by the conference: 1. Standard lumber classification. 2. Standard grade names and classifications. 3. Standard yard lumber sizes. 4. Method of lumber measurement. 5. Standard shipping weights. 6. Shipping and other provisions. This is the first step in enabling the purchase and sale of lumber on definitely determined grades and conditions and means millions in economy.

The farm implement industry in conjunction with the National Screw Thread Commission, various engineering societies, and other groups determined upon standard dimensions and sizes of various bolts and nuts at a conference on February 19 and

20, 1924. Three major types of bolts and nuts considered were plow, carriage and machine. Four types and designs of plow bolts, 10 sizes of carriage bolts and 10 sizes of machine bolts were adopted as standards. In addition, 6 sizes of wrenches were established as standards. This project will not only permit of concentrated production on standard sizes and reduce large stocks in the hands of manufacturers and dealers, but will materially aid the farmer.

The Farmers Grain & Mercantile Company of Nappanee, Ind., has made an assignment for the benefit of its creditors.

The Western Grain Company of Kansas City, Mo., has gone into bankruptcy with liabilities of \$45,000 and assets of \$15,000. The company was capitalized at \$50,000. C. M. Woodward, F. G. Endelman, and W. G. Dilts are stockholders. B. C. Moore is receiver for the firm.

For Sale

MACHINERY

OIL ENGINES FOR SALE

Fifteen-horse Y type; 10-horse Y type. Ready for delivery. A. H. McDONALD, 547 W. Monroe St., Chicago, Ill.

WANTED TO BUY

Good second-hand molasses feed machinery including feeders, pump, heater, storage tanks, etc. M. G. C., Box 3, care American Elevator and Grain Trade, 431 S. Dearborn St., Chicago, Ill.

FOR SALE

Pulleys, 1,000; all sizes, solid cast iron, wood and steel split. Elevator belts and buckets and supplies. STANDARD MILL SUPPLY COMPANY, 501 Waldheim Building, Kansas City, Mo.

OIL ENGINES FOR SALE

60-horsepower Fairbanks-Morse.
50-horsepower Otto.
25-horsepower Fairbanks-Morse.
50 other sizes.
A. H. McDONALD, 547 W. Monroe St., Chicago, Ill.

FOR SALE

One 22-in. Bauer Ball Bearing Attrition Mill.
One 24-in. Dreadnaught Ball Bearing Grinder.
One 18-in. American Grinder, motor attached
One 18-in. Dreadnaught Grinder.
One Hammar Type Grinder.
One 18-in. Monarch Attrition Mill.
L. F. PERRIN, Box 222, Fort Wayne, Indiana.

ELEVATORS AND MILLS

FOR SALE OR RENT

Up-to-date Wisconsin grain elevator and flour and feed house. EMIL HAUTERBROOK, 1272 Walnut St., Green Bay, Wis.

FOR SALE OR RENT

Indiana elevator located on Pennsylvania Railroad; feed grinding equipment; electric power. Small investment required. BOX 597, Warsaw, Ind.

FOR SALE

Country Elevator in first class condition. Business well established. Best paying proposition in this section. Reason for selling, retiring from business. Write us for particulars.

Duck River Grain Co.
DENVER TENNESSEE

FOR SALE

In central western Indiana. Two 16,000-bushel capacity elevators; one electric, one steam; in order to dissolve partnership. NEWTON BUSENBARK GRAIN COMPANY, Crawfordsville, Ind.

FOR SALE

Northeast Kansas elevator, capacity 14,000 bushels, feed and coal business in connection; located on St. Joseph and Grand Island Railway. HAMLIN CO-OPERATIVE ASSOCIATION, Hamlin, Kan.

FLOUR MILL FOR SALE

Central Indiana; dairy country; 125 barrels' capacity; steam power. Long established; doing capacity business; good reasons for selling. Price \$22,000 including real estate. W. E. BURKHART & CO., 226 American Central Life Bldg., Indianapolis, Ind.

GRAIN ELEVATOR FOR SALE

Established trade in thriving Wisconsin town. All concrete construction and equipped with modern, economically operated machinery. Located in good grain, feed and seed section. WISCONSIN ELEVATOR, Box 2, care AMERICAN ELEVATOR AND GRAIN TRADE, 431 S. Dearborn St., Chicago, Ill.

Miscellaneous Notices

FOR SALE

Sunflower seed in car lots or less. EBBERTS GRAIN COMPANY, Louisville, Ky.

FOR SALE

Home Grown Mammoth, Medium and Alsike seed. WALTER G. TRUMPLER, Tiffin, Ohio.

FOR SALE

Reid's Yellow Dent Seed Corn, 3,000 bushels. Raised on Alfalfa land. JOHNSON LAND COMPANY, Seward, Neb.

FLOUR AND MILL FEEDS

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products. ANSTED & BURK CO., Springfield, Ohio.

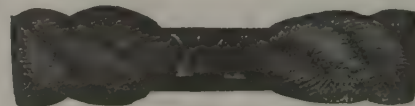
FROSTPROOF CABBAGE PLANTS

We are large growers of open field grown plants. Early Jersey, Big Type Charleston, Early Flat Dutch, Succession, Copenhagen Market. Prepaid mail 400, \$1.00; 1,000, \$2.00; by express 2,000, \$3.00; 5,000, \$6.25; 10,000, \$10.00. Get price list. Sweet potato, tomato, lettuce, beets, and all other plants. TUCKERS PLANT COMPANY, Atlanta, Ga.

WANTED

Superintendent for large mixed feed plant and elevator in large eastern city. Applicant must thoroughly understand handling and milling grain, mixing of poultry and molasses feeds, and be able to handle labor. Must be thoroughly experienced and well recommended. To such a man we offer a fine opportunity with excellent future. Give all details in letter. SUPERINTENDENT, Box 3, care American Elevator and Grain Trade, 431 S. Dearborn St., Chicago, Ill.

Hunt Coupling for Controlling the Stretch of Manila Transmission Ropes



Ask for Descriptive Catalog M-17-1
C. W. Hunt Co., Inc., West New Brighton, N. Y.

9½ Miles of Belting

in a single order!

Will handle 150,000 bushels of
grain per hour.

It comprises 50,000 feet of belt-
ing, weighing 300,000 pounds.

Eight freight cars will be required
for its shipment.

Watch for our next advertisement showing
this belting leaving the Diamond factory

THE DIAMOND RUBBER COMPANY, Inc., Akron, Ohio

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| Atlanta | Boston | Kansas City | Philadelphia | New York |
| Chicago | Dallas | Los Angeles | San Francisco | Seattle |

Diamond

RUBBER BELTS

CO-OPERATION IN THE FEED BUSINESS (Continued from Page 640)

the chances are that they will not average out 10 per cent. There is just so much feed consumed in your locality and as long as your distribution is local, every ton sold at 5 per cent or so below your average cost of doing business, eliminates a ton of your year's total and eliminates it at a loss.

We manufacturers come to you at certain seasons with recommendations to buy, and possibly very close prices; you in turn should go to your trade in the same spirit and give them a like opportunity—as that is co-operation and service. I am not mentioning the speculative profit a dealer is entitled to if he buys right, but I do say the same opportunity for that speculative profit should be passed along to your customers. Where would any manufacturer get off if he did not try to give you the advantage of his knowledge and ideas of the markets and his purchasing opportunities? What would your process of mind be if you thought that he had bought heavily on the bottom without saying a word to you and then sat back and waited for you to come in from time to time for supplies at advancing prices? But if you have had the opportunity and the advice from him, you would feel different if you bought later and paid him a speculative profit, wouldn't you?

There is a time coming this spring—another one or two next summer and fall—when you are going to have a chance to give your kind of co-operation as versus another kind of co-operation. How it comes out will depend on how and what you plan and do from now till then.

There are many other ways and forms of co-operation with your customers—personal knowledge and acquaintance with people, farms, stock and conditions and a systematic record of same; a positive knowledge of what in your line is needed and best, and a definite plan to present it and see that they get it. Your business is feed; you should be the local expert in that line and be looked up to as such. Merchandise, don't warehouse feed!

Another form of co-operation under this first heading is that of co-operating with the local county agent, or extension department worker. These men have a contact that is valuable to you. They are usually of your community and should welcome your help in solving their many problems. Get acquainted, study his problems a little, figure out how you can help him and a little reciprocity can be expected. Incidentally, this personal contact and acquaintance with farmer, consumer and county agent, will change a great many divergent viewpoints on both sides. It will show them that you are not a devil with horns and hoofs, and if you are honest and earnest in your desire to serve, they will soon find you a friend and, as such, much to be sought and favored. It may likewise show you that there is some rhyme and reason to their viewpoint and result in a consequent rearranging of your ideas accordingly. Personal contact between people with honest motives generally develops pleasant associations and profit to both.

YOUR FELLOW DEALERS

Getting back to the three fundamental "co-operates," the second one is to co-operate with your fellow dealers—I mean, as an industry or branch of business. If implement dealers, hardware stores, etc., profit by co-operation, why not you? The first step is, of course, meetings such as this today, with their personal contact, exchanging of ideas and experiences, solving of individual problems, the creation of friendliness and recognition of a common ground. Recognize the fact that the general good of the industry or business is your good; that if you meet a man and each have a dollar and swap those dollars, you each still have only one dollar, but if you swap ideas, you each have two ideas.

THE BENEFITS OF ORGANIZATION

The next step, of course, is organization—honest, legitimate purposes, elimination of bad practices, development of sound policies, costs of doing business, legislation, etc. You have an organization and you have at least one major issue that should cement you together and galvanize you into action, collectively and individually. But you cannot expect to get far with one or even two meetings a year and a deficit staring you in the face. Meet more often, maybe smaller groups, but on a definite plan and with a definite program. Hunt the best methods and ways of merchandising, talk frankly, be willing to give and contribute something from your knowledge and experience, and not just expect to take what you can away with you. Co-operate and you'll get co-operation. Next to co-operating with your customers, this group co-operation is most valuable.

Now, the third "co-operate" is that of co-operating with those who serve you and, through you, serve the consumer, be he a manufacturer of feed, lumber, cement or what not. The immense success of mixed feed through various co-operative agencies the last few years, I believe, shows that the potential market was there and that the right kind of co-operation between dealer and manufacturer could have opened it up through the dealer distribution system. But a combination of circum-

stances, coupled with a definite, forceful merchandising plan beat the old method, used in so many places, of giving them just what they ask for.

Select a reputable, responsible manufacturer and avail yourself of the services which he offers. Believe him to be honest, and earnest in his desire to serve you and your customers. Make up your mind that you are going to handle, feature and push some certain reputable line of mixed feeds. I have yet to see the first retail feed dealer that has made a real success or established himself solidly and substantially by handling only raw materials. On the other hand, the dealers who have been most consistent in their profits and have held their trade through thick and thin, are those who tied up to and featured well known and reputable brands of mixed feeds. Think it over and see if it doesn't startle you as a fact: Bran, middlings, cottonseed, etc., are anybody's game, therefore one beautiful mess of competition. But a good line of mixed feeds once established, is yours, and trade can be held on it and competition becomes something other than a gamble or cut-throat game.

Several manufacturers offer merchandising service that, with just a reasonable amount of co-operation on your part, will make you money. It has been proven that thousands of farmers who never used mixed feeds before, used them the past two years, because a definite, and forceful merchandis-

ing plan was carried out, and you can't expect to compete with them or your live wire competitor until you do accept and adopt a definite and strong merchandising plan. When the time comes to compete with this pool buying again, be ready to put as much effort, time and brains into it as they do; be ready to work with your feed manufacturer friend, not block him, and you will soon eliminate the pool from your town. The past year has demonstrated that the pool does not know when to buy any better than any one else and that real merchandising by a local distributor is coming to the front again.

The co-operative, direct distribution movement, due to after war conditions and present day tendencies, has and will have its costs, problems and mistakes. We do not think it is a better system of distribution than through local dealers. If it is better, it will grow and prosper, but your chances of proving your system, your chances of prospering and profiting are going to be much greater if you will devise and follow a system of co-operation, such as I have outlined:

First—Customer co-operation.

Second—Dealer co-operation as a group.

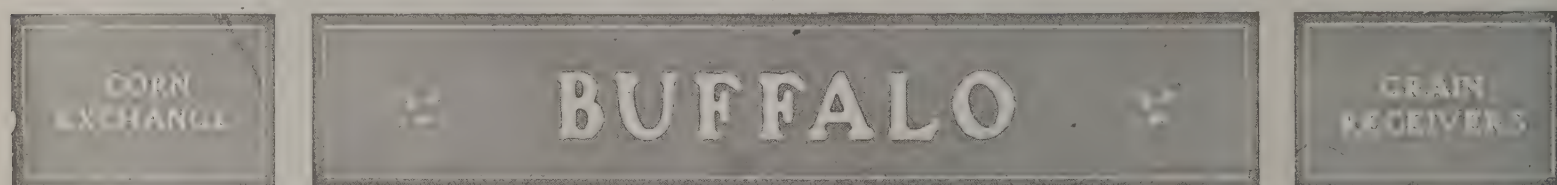
Third—Manufacturer co-operation.

Co-operation being the order of the day, take advantage of it, and devise and operate a good co-operative system of your own.

EFFECT OF BURNING ON PASTURAGE

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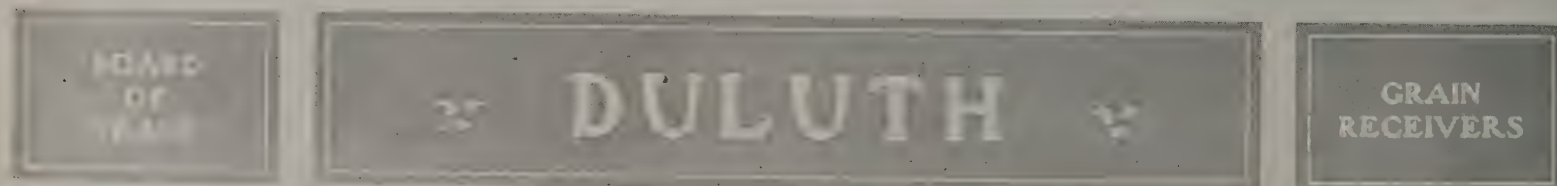
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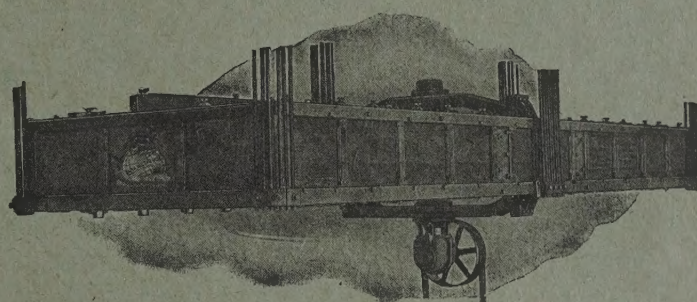
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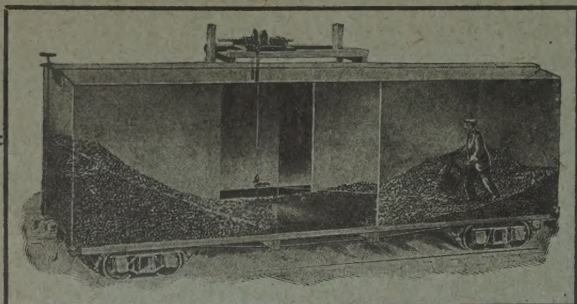
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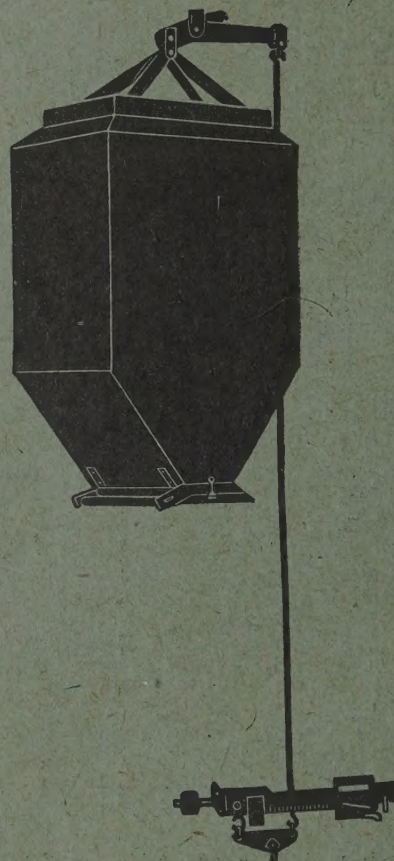


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